

**Background:** Greenland (Greenlandic: *Kalaallit Nunaat*, pronounced [kala:lit nuna:t]; Danish: *Grønland*) is an autonomous constituent country within the Kingdom of Denmark between the Arctic and Atlantic Oceans, east of the Canadian Arctic Archipelago. Though physio-graphically a part of the continent of North America, Greenland has been politically and culturally associated with Europe (specifically Norway and Denmark, the colonial powers, as well as the nearby island of Iceland) for more than a millennium. The majority of its residents are Inuit, whose ancestors began migrating from the Canadian mainland in the 13<sup>th</sup> century, gradually settling across the island.

Greenland is the world's largest "island". Australia and Antarctica, although larger, are generally considered to be "continental landmasses" rather than islands. Three-quarters of Greenland is covered by the only permanent ice sheet outside Antarctica. With a population of about 56,480 (2013), it is the least densely populated territory in the world. About a third of the population live in Nuuk, the capital and largest city.

The early Viking settlers named the island as Greenland. In the Icelandic sagas, the Norwegian-born Icelander Erik the Red was said to be exiled from Iceland for manslaughter. Along with his extended family and his *thralls* (i.e. slaves or serfs), he set out in ships to explore an icy land known to lie to the northwest. After finding a habitable area and settling there, he

named it *Grœnland* [translated as "Greenland"], supposedly in the hope that the pleasant name would attract settlers. The *Saga of Erik the Red* states: "In the summer, Erik left to settle in the country he had found, which he called Greenland, as he said people would be attracted there if it had a favorable name."

The name of the country in the indigenous Greenlandic language is *Kalaallit Nunaat* [land of the Kalaallit]. The Kalaallit are the indigenous Greenlandic Inuit people who inhabit the country's western region.

Greenland has been inhabited off and on for at least the last 4,500 years by Arctic peoples whose forebears migrated there from what is now Canada. Norsemen settled the uninhabited southern part of Greenland beginning in the 10<sup>th</sup> century, having previously settled Iceland to escape persecution from the King of Norway and his central government. In 981 Norse Vikings explored and colonized the southwest coast of what is now Greenland. They form a more or less separate state that disappears in 1410. These Norsemen would later set sail from Greenland and Iceland, with Leif Erikson becoming the first known European to reach North America nearly 500 years before Columbus reached the Caribbean islands. Inuit peoples arrived in the 13<sup>th</sup> century.

Though under continuous influence of Norway and Norwegians, Greenland was not formally under the Norwegian crown until 1262. The Norse colonies disappeared in the 15<sup>th</sup> century when Norway was hit by the Black Death and entered a severe decline. Soon after their demise, beginning in 1499, the Portuguese briefly explored and claimed the island, naming it *Terra do Lavrador* (later applied to Labrador in Canada). According to H. P. Biggar (a historian and Canadian archivist),

the Cabots (John and Sebastian) came upon the eastern coast of Greenland. This coast was called "*Labrador's Land*" as it was first sighted by the Portuguese, João Fernandes, the "*llabrador*" or laborer, whom John Cabot had brought with him from the Azores, where he had gone the previous summer to recruit skilled seamen for his crew. Turning north, "*they had,*" says Peter Martyr, "*in a manner continual daylight.*" The action of the compass in those high latitudes might well cause the alarm expressed in the above inscriptions. The evidence that the landfall of the Cabots was Greenland and not Labrador is cited by Biggar.



Denmark-Norway (the *Kalmar Union*) nonetheless claimed the territory, and after several centuries of no contact between the Norse Greenlanders and the Scandinavian motherland it was feared that they had lapsed back into paganism, so a missionary expedition was sent out to reinstate Christianity in 1721. However, since none of the lost Norse Greenlanders were found, Denmark-Norway instead proceeded to baptize the local Inuit Greenlanders and develop trading colonies along the coast as part of its aspirations as a colonial power. Colonial privileges were retained, such as a trade monopoly. The colony of Greenland was re-established in 1775.

It has not been shown if the Norsemen or the indigenous people of Greenland engaged in map-making. But even if they did, no artifacts have survived. Add to that fact is that during the ancient and medieval periods communication between the northern regions (Scandinavia, Iceland, Greenland, etc.) and central and southern Europe, where map-making was a tradition and artifacts have survived, was very minimal at best.

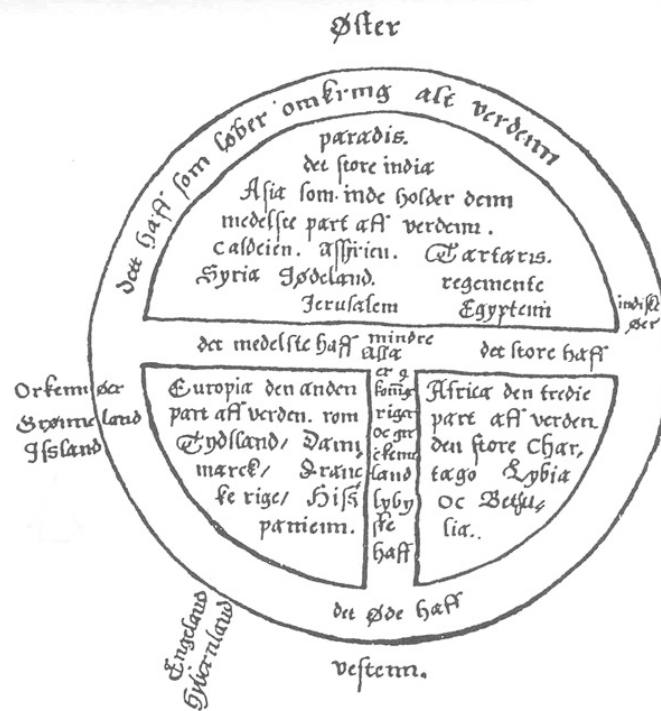
The first account of Greenland given to the world, indeed the first mention of that region in literature is by Adam of Bremen, an ecclesiastical official and geographical author. He interviewed the King Sweyn of Denmark in 1069, and

acquired from him divers Scandinavian and other northern items that Adam embodied in his 1076 work *Descriptio Insularum Aquilonis* [the Description of the Northern Islands]. Fridtjof Nansen, *In Northern Mists*, quotes, with other matter, the following passages:

On the north this ocean flows past the Orchades, thence endlessly around the circle of the earth having on the left Hybernia, the home of the Scots, which is now called Ireland, and on the right the skerries of Nordmannia. and farther off the island of Iceland and Greenland . . .

... Furthermore there are many other islands in the great ocean, of which Greenland is not the least; it lies farther out in the ocean, opposite the mountains of Suedea, or the Riphean range. To this island, it is said one can sail from the shore of Nortmannia [sic] in five or seven days, as likewise to Iceland. The people there are blue ("cernlei", bluish-green) from the salt water; and from this the region takes its name. They live in a similar fashion to the Icelanders, except that they are more cruel and trouble seafarers by predatory attacks. To them also, as reported, Christianity lately been wafted.

It is not clear where Adam supposed Greenland to be located; perhaps he, too, was not clear about the matter. The earlier of his two passages on the subject seems to call for something like the true location in the far west; but the later mention of the mountains of Sweden has been understood by the most learned commentators to indicate a site directly north of Norway. King Sweyn perhaps had a fairly good idea of the sailing courses for Iceland and Greenland, but his guest may have assimilated the information rather confusedly. Adam seems convinced that Greenland was a distinctly oceanic island, with no suggestion of any near relation to any continent. In this respect he differs from certain maps of the 15<sup>th</sup> century which are illustrated below. We know now that the truth lies between these views; that the highly glaciated mass which we name in its entirety Greenland is indeed, an island and probably the largest of islands but an island with the aspect and attributes of a peninsula, being barely severed from that polar archipelago which crowns the American mainland and being not very remote at one point from the mainland itself.



13<sup>th</sup> century T-O List map, the first to mention Greenland (lower left) #205XX

European interest in exploring and mapping of the northern and arctic regions prior to the 16<sup>th</sup> century was generally lacking. As Kirsten Seaver explains in her book *Maps, Myths, and Men*, the reason for this cartographic disinterest is not hard to find. While Iceland was visible in European trade from early on (its most unique resource being sulfur, and its most plentiful ones fish and wool cloth), nothing beyond Iceland had an acknowledged economic impact on pre-Columbian Europe, not even in the British Isles. Certainly, the Norse Greenlanders exported such commonly used goods as falcons, hides, wool cloth, eiderdown, blubber, walrus ivory, and various furs, but those wares were sold through Norwegian markets and were indistinguishable from other northern goods, including many from Iceland.

Had Greenland been known as a source of gold, silk, or spices, European scholars from the 11<sup>th</sup> century onward would quite likely have fitted this remote area into their mapmaking. Similarly, if Greenland had been perceived as having a particular religious significance, it might well have appeared on maps conceptually similar to those that show an *Earthly Paradise* in the middle of Asia. However, at that time Greenland clearly did not represent either a celestial or mercantile paradise, and it is equally obvious from the cartographical record that the Norse themselves did little to call attention to the remote regions they themselves knew and used.

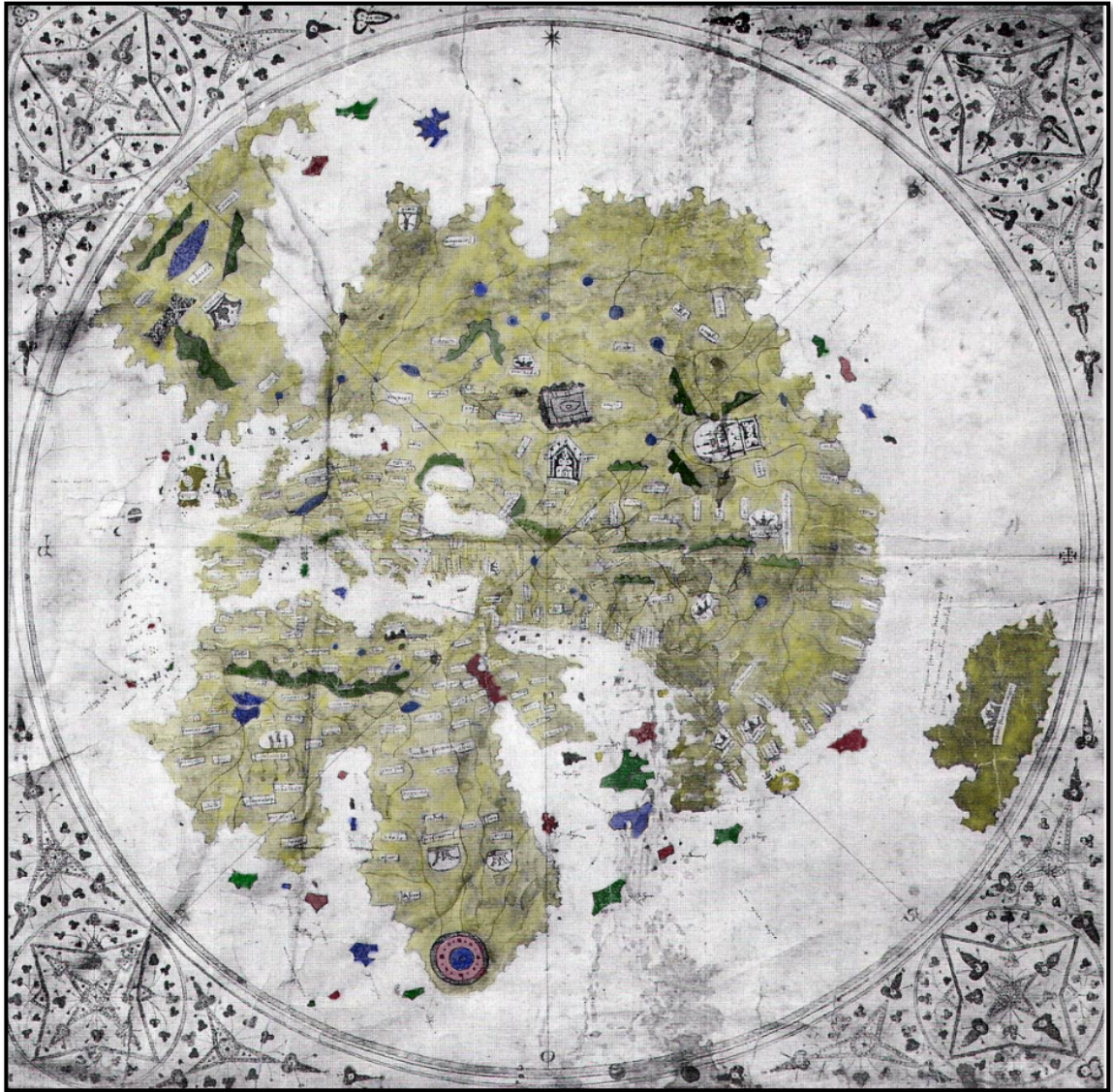
After the new European discoveries beginning with Columbus, da Gama and Magellan, the desire to find a quick and efficient sailing route to Asia greatly increased and the previously ignored northwestern route became an obsession for some. This resulted in more cartographic attention to the northern Europe and arctic regions.



Below is a survey of existing attempts to represent Greenland on early maps. They are organized into several groups based upon their geographical approach: as a **peninsula extending from Europe** (Scandinavia), as **a peninsula extending from Asia** (as part of the new discoveries), or as part of the greater Eurasian continent, and **as an island**. Those maps with a reference number (#XXX) indicates maps that have a more extensive monograph written on this website.

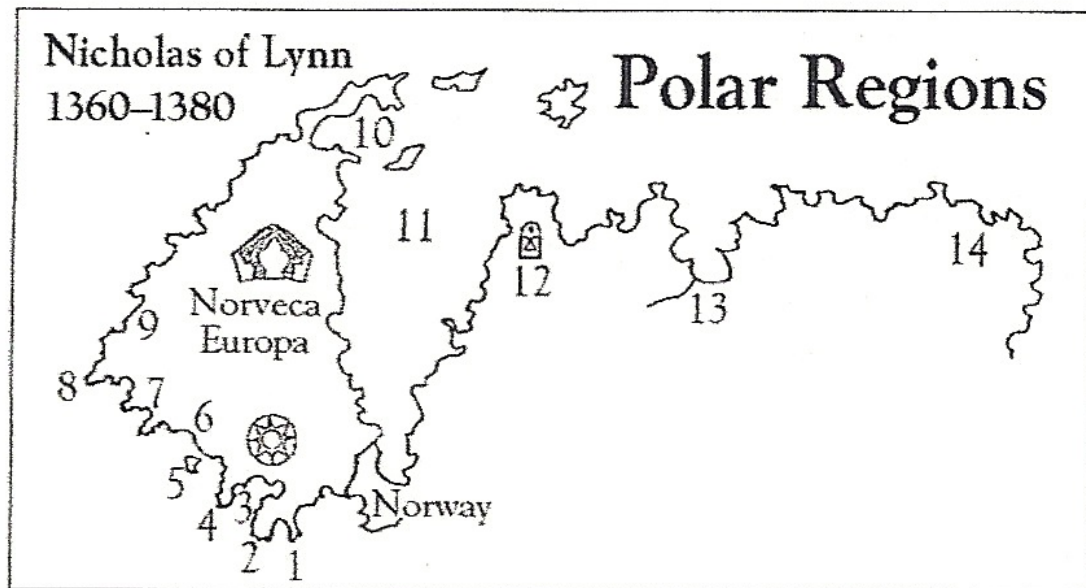
**Greenland as a European Peninsula:** The passages from Adam of Bremen above presented a beautiful bit of confusion, which was to leave its mark in cartography. The first quote definitely places Greenland far out in the ocean, while the second relates it in some way to the mountains of Sweden (The "*Rhiphaean Mountains*" are a myth in themselves). In medieval geography a position "opposite" something usually meant "in the same latitude," and if this was what Adam of Bremen intended, he was quite correct in relating what was then known of Greenland to Sweden. But such loose terminology was wide open to misunderstanding, and it was apparently these two irreconcilable statements by Adam of Bremen that gave rise to the late-medieval concept of Greenland as a peninsula of Europe, or as a region connected with Europe by a long land-bridge. None of the early inhabitants of Scandinavia or Greenland had a tradition of map-making, thereby leaving that task to other Europeans beginning in the 15<sup>th</sup> century.

Although somewhat debatable, the earliest map that could be argued to contain a representation of Greenland is a now lost world map, shown below, produced in 1415 by Albertin de Virga (#240).



*A colorized copy of the world map by Albertin de Virga. 1415 (#240)*





*A sketch of the northern section of de Virga's world map reveals the legacy of a survey by Nicholas of Lynn, according to Gunnar Thompson. He suggests that most of the lands identified as "Polar Regions" correspond to territories near or beyond the Magnetic North Pole: 1) Greenland; 2) Baffinland; 3) Ginnungagap or Hudson Strait; 4) Labrador; 5) Newfoundland; 6) St. Lawrence River and Gaspé Peninsula; 7) Nova Scotia or Norumbega.*

However, according to most other scholars, logically, the land mass in the map's northwest corner, featuring a crown and the name *Norveca* (repeated in three more places, probably to indicate the three major Norwegian towns) would then represent his concept of southwest Sweden detached from Danish *Scania* and of southern Norway from its attachment with Sweden at least as far north and west as Bergen.

That the land mass called *Norveca* has nothing to do with either Greenland or North America should be abundantly clear from the nomenclature alone; it also is firmly connected to the world Albertin de Virga and his contemporaries already knew. Again, it must be noted that the northernmost regions of Europe (Scandinavia, Russia, etc.) were not very well understood or known to the rest of Europe. Direct trade between southern Europe and Iceland had not yet begun (Icelanders primarily traded directly with Norway/Debmek), a circumstance that explains why de Virga's map does not show an island named Iceland or *Tyle/Thule* (Ptolemy's name for the farthest north). The omission of this island by any name also demonstrates, as does the rest of the map, that de Virga did not base his work on the Ptolemaic concepts that had barely begun to enter European thought at the time.

Although he clearly did not know the shape of Norway, de Virga would have been aware of the country's existence. Anyone living in Venice around 1415 who had commercial ties or who was curious about geography would have known that Norway lay far to the north, that it dominated the stockfish trade, and that the country was mountainous and probably very large. Nobody could describe its shape and extent, but on several maps of the early 15<sup>th</sup> century Norway appears as a rectangle framed and bisected by mountains. De Virga's fellow Venetian cartographers, Andrea Bianco (#241) and Fra Mauro (#249), accorded Norway plenty of space in 1436 and 1459, respectively. Nevertheless, reports written by the Venetian nobleman Piero Querini and two of his crew about their enforced 1431 sojourn in the Norwegian Lofoten islands make it clear that Norway was as exotic to 15<sup>th</sup> century Italians as the Brazilian jungles were to 19<sup>th</sup> century European explorers.

It is tempting to assume that medieval churchmen who had spent time in the Far North contributed to Rome's knowledge of this remote region and that this knowledge long had been diffused through various channels of culture and learning. In reality, information flowed primarily in the opposite direction from the 11<sup>th</sup> century onward. Adam of Bremen's writing about the North depended more on the European accounts available to him than on the information brought to him by the Danes, and medieval Norse literature demonstrates greater awareness of Adam's writing, as well as other European geographical and cosmographical works, than of information derived directly from their own northern background.

According to most historians, the credit of having introduced the name of *Greenland*, with the ancient Norsemen's geographical ideas about the extreme North, into cartography belongs, so far as is known, to the Dane Claudius Claussøn Swart, usually called in Latin Claudius Clavus (sometimes also Nicolaus Niger). He was born in Funen, travelled about Europe, was probably the "Nicolaus Gothus" who is mentioned at Rome in January 1424. We are told that he was a man of acute intelligence, but a rover and unsteady. His subsequent history is unknown. As a supplement to Ptolemy's *Geography*, which just at that time (1409) was becoming known in Western Europe in a Latin translation, he made, probably in Italy, two maps of the North, with accompanying descriptions. The maps must have been drawn either by himself or with his help. They are the first maps known in Western Europe that are furnished, after the model of Ptolemy (or Marinus, #119), with lines of latitude and longitude, and they thus mark the beginning of a more scientific cartography and geography in Western Europe. His first map (the so-called *Nancy* map) must have been drawn between the years 1413 and 1427, probably between 1424 and 1427; but it can never have been widely known, as it has exercised no



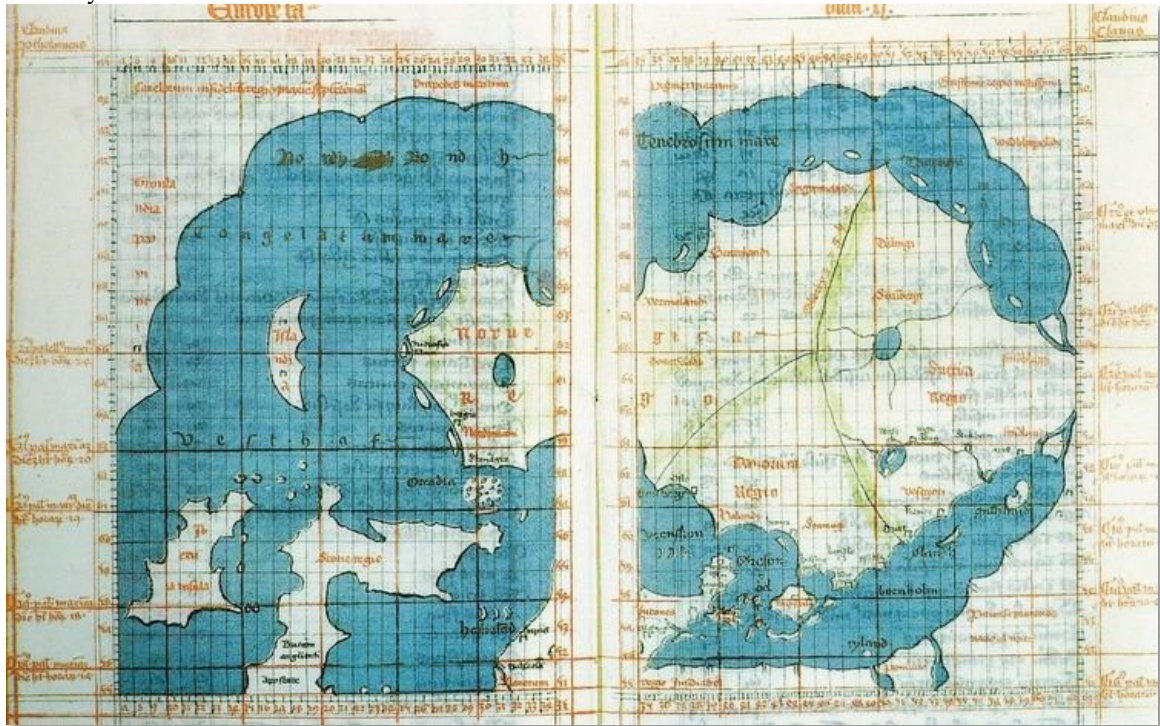
noticeable influence on the cartography of the succeeding period. The French cardinal Filastre, who was staying in Rome in 1427, was acquainted with the map there, and made a reduced copy of it, which, together with a copy of the accompanying text, he had bound up with his copy of the Latin translation of Ptolemy's *Geography* with maps. This work was not rediscovered at Nancy until 1835, when it was published; the map is therefore usually called the *Nancy* map. Clavus' second map, which seems to have been drawn later than that just mentioned, has on the other hand had considerable influence on the cartographical representation of the northern regions through a period of two centuries. A copy of the later map was first brought to light by the historian A.E. Nordenskiöld at Warsaw in 1889; since then several copies have been rescued from oblivion, while the text accompanying the map was accidentally discovered in 1900 by Dr. A. A. Björnbo in a medieval manuscript at Vienna. The original map is lost; but except as regards details of no great consequence there can now be no doubt as to what it was like.

The 1427 map of Claudius Clavus displayed *Gronlandia Provincia* as this peninsular adjunct to the northwest of Europe, a view enforced also in a map of 1447, in the Pitti palace, and in one which Nordenskiöld found in a Codex of Ptolemy at Warsaw, dated in 1467. A few years later, and certainly before Columbus could have gone on this voyage, we find a map which it is more probable he could have known, and that is the engraved one of Nicholas Donis, drawn presumably in 1471, and later included in the edition of Ptolemy published at Ulm in 1482. The same European connection is here maintained. Again it is represented in the map of Henricus Martellus (1489-90), in a way that produced a succession of maps, which, until long after the death of Columbus, continued to make this Norse colony a territorial appendage of Scandinavian Europe, betraying not the slightest symptom of a belief that Eric the Red had strayed beyond the circle of European connections.

Research on early European geographical and historical concepts of the far north, especially as depicted on several *tabulae modernae* made for Ptolemy's *Geographia* (#119) and on Johann Schöner's 1515 globe (#328), is hampered by inadequate information about the Danish map-maker Claudius Clavus. Further investigation prompts the conclusion that, contrary to received wisdom, the *Nancy* work is by Clavus' own hand and not the work of a copyist, while the Vienna manuscripts do not serve to support the long-standing claim that Clavus had authored an expanded account and a post-1427 map, now lost. The 1427 map of northwestern Europe by Claudius Clavus shows the islands of Iceland, Ireland, with Scotland and the northern portion of England and the western portion of Norway. This map also contains the eastern portion of Greenland, and Clavus is believed to be the first cartographer to include Greenland on a major map according to the historian Justin Winsor.

In 1412-13 at the age of 25 Clavus started to travel around Europe and appeared eleven years later (1423-24) in Rome. It is believed he travelled as far north as 70°10' N. In Rome he became friends with the cardinal Giordano Orsini and the pope's secretary Gian Francesco Poggio Bracciolini, who were among those working to update the old Roman cartography. Claudius contributed to a more realistic description of Nordic countries, in particular Iceland and Greenland. He is also known for having named Greenlandic places by using lyrics from old folk songs. Unfortunately, most of his work (including two maps) is lost, but a copy has been

preserved through the German cartographers Donnus Nicholas Germanus and Henricus Martellus Germanus, and in the 19<sup>th</sup> century more texts were rediscovered in the imperial library at Vienna. He drew 27 maps for a copy of the *Geography* by Ptolemy.



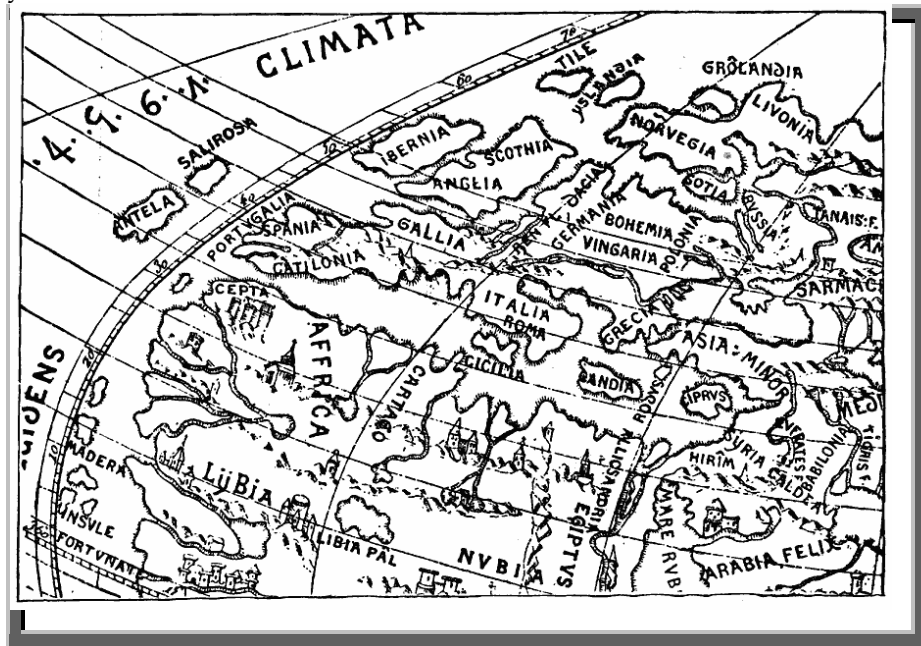
The Nancy map, a copy of the 1427 map by Cladius Clavus showing northern Europe and Greenland as an extension of Europe, wrapping around Scandinavia and the British Isles. This map shows the east coast of Greenland and cuts off there. The location is right and the trend of the coastline remarkably accurate; but his Greenland is shown as the western terminus of a long looping land-bridge which swings far north of Iceland to connect up with the North European coast to the east of the White Sea. Numerous maps later were to copy this misconception. According to Clavus' own scale of latitude on the right-hand side of the Nancy map, we get the following latitudes: Bergen 60°, the southern point of Greenland 59° 15', Stavanger 58° 30'. In reality the latitudes of these places are: 60° 24', 59° 46', and 58° 58'.

If we assume that Clavus, even in the construction of his first map, made use of the Medicean map of the world (#233), according to Fridtjof Nansen in his book "In Northern Mists", and that Clavus' Greenland is the most westerly peninsula of the latter's Norway, it will seem strange that he did not also draw the west coast of that peninsula, which would naturally become the west coast of Greenland. It is true that the Nancy map is only a copy, but as the west coast of Greenland is not mentioned in the copy of Clavus' text either, we are bound to believe that he did not include it. The margin on the western side of Clavus' first map was evidently determined by that of Ptolemy's map of the British Isles, and follows precisely the same meridian. Thus there was no room for the Medici map's peninsula corresponding to Clavus' Greenland. As already stated, it is difficult to get away from the belief that the Medici map was used for the east coast of Greenland, the south coast of Norway, etc.; the resemblances are too great, and otherwise inexplicable. Adam of Bremen's 11<sup>th</sup> century view of Greenland, which he described as an island, obviously had not registered with Claudius

*Clavus, who gave Greenland a massive peninsular form. For a long time after the second half of the 15<sup>th</sup> century, Ptolemaic maps incorporated Claudius Clavus' concept of a peninsular Greenland, sometimes as an extrusion at the northwestern edge of the Eurasian continent and sometimes as a peninsula running east-west above Norway. The Nancy map) may presuppose the following sources, besides Ptolemy's various maps of northern Europe: Pietro Vesconte's mappamundi (circa 1320) In Moino Sanudo's work,<sup>1</sup> and the anonymoul mappamundi, now presevered in the so-called Medicean Atlas of 1351.*

A few years later, or perhaps about the same time, and before 1471, the earliest engraved map which shows Greenland is that of Nicolas Donis, in the Ulm edition of Ptolemy in 1482. It will be seen from the little sketch which is annexed that the same doubling of Greenland is adhered to. With the usual perversion put upon the Norse stories, Iceland is made to lie due west of Greenland, though not shown in the present sketch.

At a date not much later, say 1486, it is supposed the *Laon globe* (#259), dated in 1493, was actually made, or at least it is shown that in some parts the knowledge was rather of the earlier date, and here we have *Grolandia*, a small island off the Norway coast.

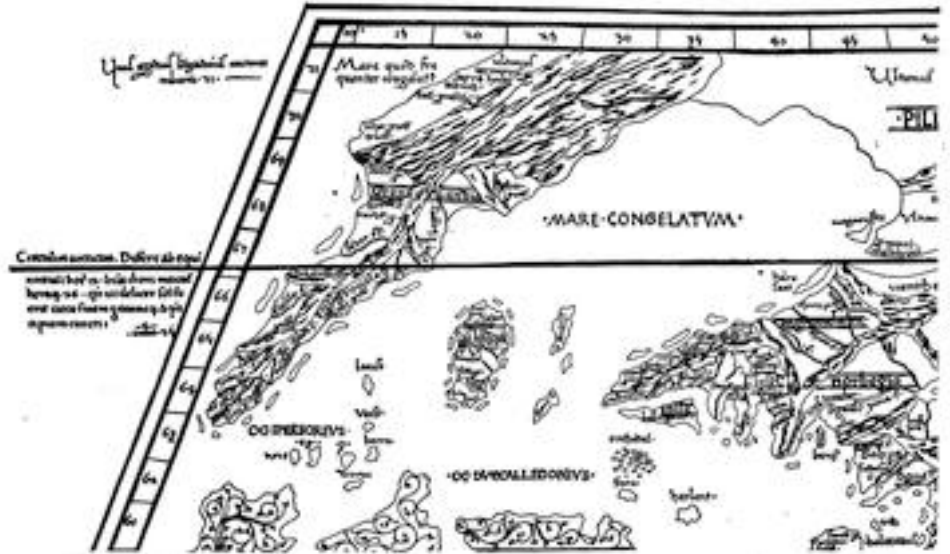


*A facsimile by D'Avezac of a section of the Laon Globe (#259). This facsimile shows Western Europe, the Mediterranean, Asia Minor, and northern Africa from the Red Sea to Cape Fortuna (Cape Verde) and Grolandia, a small island off the Norway coast.*

We again owe it to historian Nordenskjöld for the discovery of another map of the north, *Tabula Regionum Septentrionalium*, which he found in a Codex of Ptolemy in Warsaw, and which he places about 1467. The accompanying partial sketch is reproduced from a facsimile. The peninsula of *Gronlandia*, with its indicated glaciers, is placed with tolerable accuracy as the western extremity of an arctic region, which to the north of Europe is separated from the Scandinavian peninsula by a channel from the *Mare Gotticum* [Baltic Sea], which sweeps above Norway into the *Mare Congelatum*. The confused notions arising from an attempt by the compiler of the



map to harmonize different drafts is shown by his drawing a second Greenland (*Engronelant*) to his *Norbergia* [Norway] and placing just under it the “Thile” of the ancients, which he makes a different island from *Islandia*, placed in proper relations to his larger Greenland.

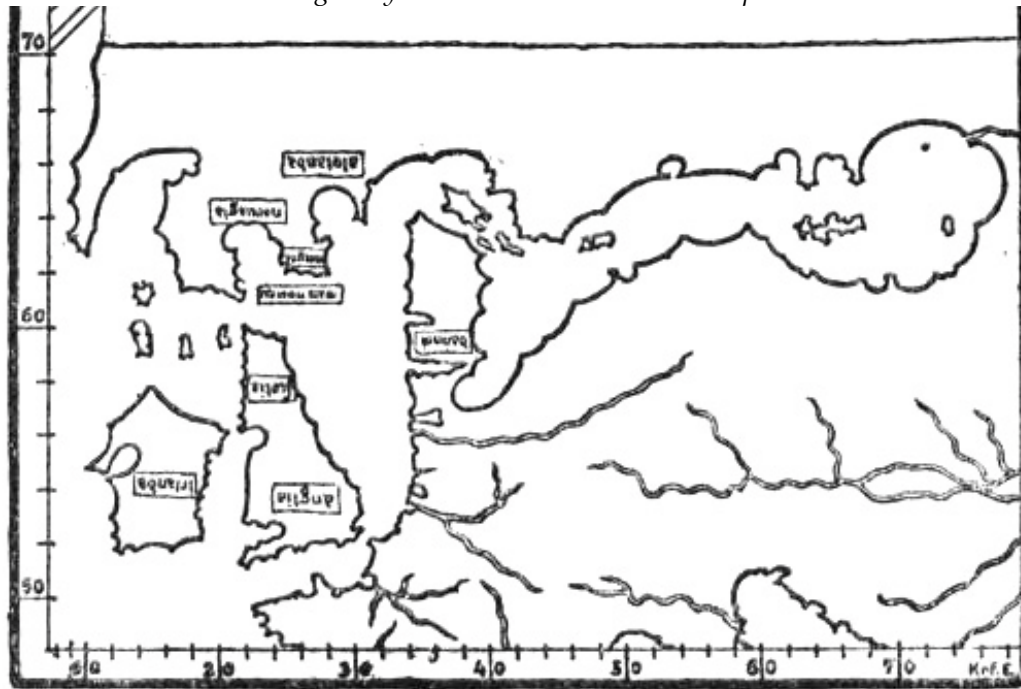


*Tabula Regionum Septentrionalium, 1467*



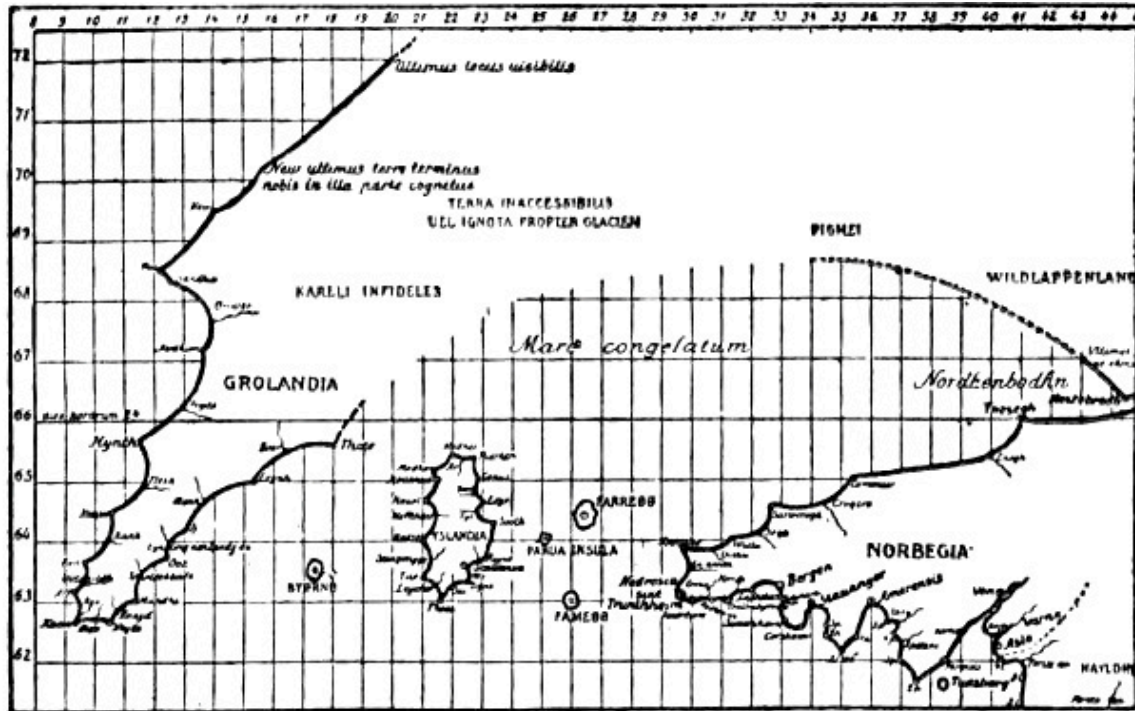


*Portolano Laurenziano Gaddiano [Laurentian Sea Atlas, or, the Medicean Atlas], 1351*  
 (#233)  
 originally oriented with South at the top



*Scandinavia on the map of Europe in the Medici Atlas, 1351*

There is an important difference between Clavus' first and second maps (and also between his first and second texts) that, on the latter, Greenland is given a west coast. Its form bears an altogether striking resemblance to the west coast of the corresponding peninsula on the *Medicean mappamundi* (#233), so that there can be no doubt that this coast is copied from it. This is notably the case if we confine ourselves to Björnbo and Petersen's reconstruction of the coast after the text of Clavus (*shown below*), from which it appears plainly enough that there are the same number of bays as on the *Medici* map; they are closest together near the southern point of the country; then come two larger bays to the north, then a very broad bay, longer than the two others together, and then a straighter coast-line to the north of that.



The second Cladius Clavus map, ca. 1427-30, re-constructed in 1904 by A. A. Björnbo after Clavus' later description in the so-called Vienna text, showing the west coast of Greenland

The east coast of Greenland has in part been provided with corresponding bays, although this coast is almost straight on the Medici map; but this answers to the north coast of Scandinavia on the *Nancy* map having very nearly the same indentations as the south coast. In taking the *Medici* map as the foundation of Clavus' Greenland coast we also have a natural explanation of the relation between his distribution of names on the east coast and the west. In his later text it is striking that his description of the east coast of Greenland does not reach farther than to his *Thær promontorium* in  $65^{\circ} 35'N$ , while the description of the west coast goes as far north as  $72^{\circ}N$ . This might seem to be connected with real local knowledge, since the latitude  $65^{\circ} 35'N$  on the east coast agrees in a remarkable way with the latitude of Cape Dan,  $65^{\circ} 32'N$ , where the coast turns in a more northerly direction. To the north of this the coast is usually blocked with ice, and this place has therefore frequently been given as the northern limit of the known east coast, and probably it was there that the Icelanders first arrived off the land on their voyage westward to the Greenland settlements. But this is one of those accidental coincidences that sometimes occur, and that warn us to be careful not to draw too many conclusions from evidence of this nature. We find the explanation in the *Medici* map, where the east coast of the peninsula corresponding to Greenland does not go farther north than to about the same latitude as the promontory on the south side of the broad bay already referred to on the west coast, which promontory Clavus calls *Hynth* [*Hyrch*]; it lies in  $65^{\circ} 40'N$ . As Clavus' coast from this point of the east coast northward had no map to depend on, he did not venture to go farther in his description this time, though in the *Nancy* text he goes to  $71^{\circ}N$  with his northernmost cape.



Map of the northern regions by Nicolas Germanus, 1457 based upon Claudius Clavus' map of 1427. Clavus' concept depicts Greenland as a long peninsula expending southwest from northern Europe. Owing to the map being transferred to the latter's trapezoidal projection, with converging meridians, Greenland, for instance, has been given a very oblique appearance.

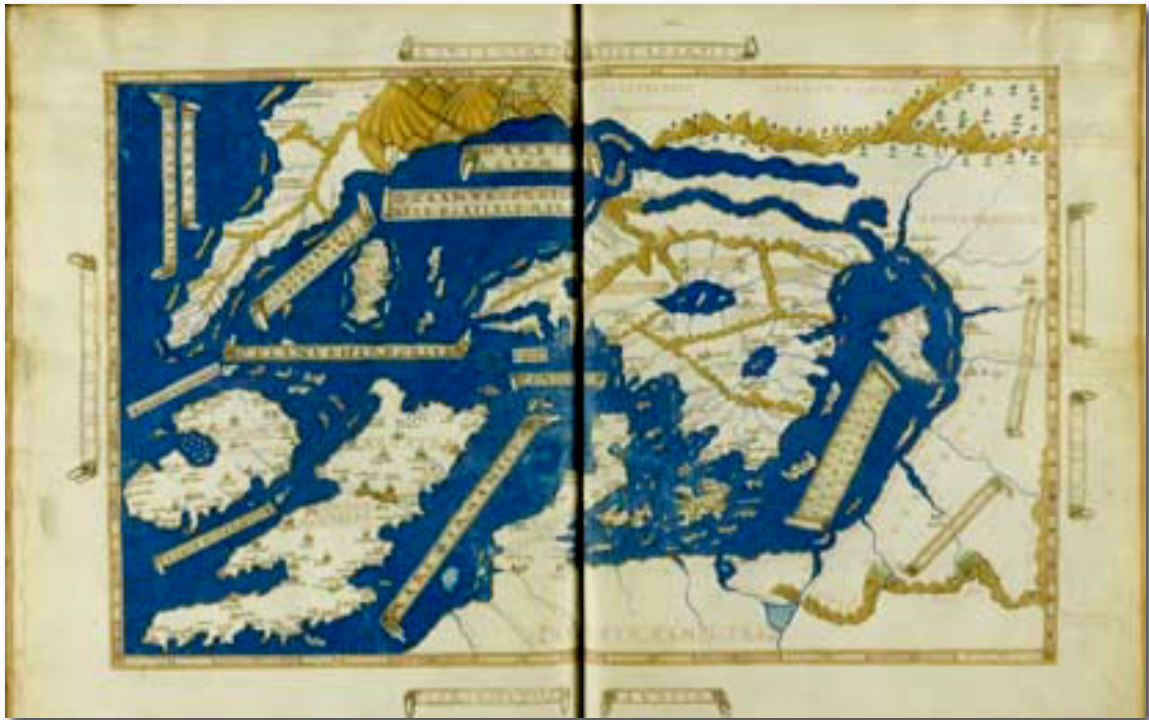
We have in 1489-90 a type of configuration, which later became prevalent. It is taken from an *Insularium illustratum Henrici Martelli Germani*, a manuscript preserved in the British Museum, and shows, as seen by the annexed extract, a long narrow peninsula, running southwest from the northern verge of Europe. A sketch of the whole map is given elsewhere.

This seems to have been the prevailing notion of what and where Greenland was at the time of Columbus' voyage, and it could have carried no significance to his mind that the explorations of the Norse had found the Asiatic mainland, which he hoped to discover. How far this notion was departed from by Behaim in his globe of 1492 (#258) depends upon the interpretation to be given to a group of islands, northwest of Iceland and northeast of Asia, upon the larger of which he writes among its mountains, "Hi man wise Volker."

As this sketch of the cartographical development goes on, it will be seen how slow the map-makers were to perceive the real significance of the Norse discoveries, and how reluctant they were to connect them with the discoveries that followed in the train of Columbus, though occasionally there is one who is possessed with a sort of prevision. The Cantino map of 1502 (#306) does not settle the question, for a point lying northeast of the Portuguese discoveries in the Newfoundland region only seems to be the southern extremity of Greenland. What was apparently a working Portuguese chart of 1503 grasps pretty clearly the relations of Greenland to Labrador.



Another example of this configuration is from Henricus Martellus (#256). In the north, *Greenland* is, again, a long, skinny peninsula attached to Europe and north of Scandinavia, a concept derived from the Claudius Clavus map of 1427.



*An example of Martellus' Illustrated Islands, showing England, Ireland, Greenland, Scandinavia.*

*This map is derived from the lost second map of the North constructed by the Dane Claudius Clavus about 1430, which was to be the model for the representation of Greenland throughout the 15<sup>th</sup> and 16<sup>th</sup> centuries. Greenland is depicted as a peninsula connected to lands round the Pole and to northern Eurasia, and extending to the west of Iceland and south to a terminal cape in 62.5° N latitude. The maps of Clavus were the first in which the name Greenland appeared; although they were probably compiled only from written sources, such as medieval Norse sailing directions, individual features of the coast are distinguished (but with fictitious names). A point on the west coast, in 70°N, is named by Henricus Martellus, following Clavus, as 'ultimus terre terminus', i.e. the furthest land known.*





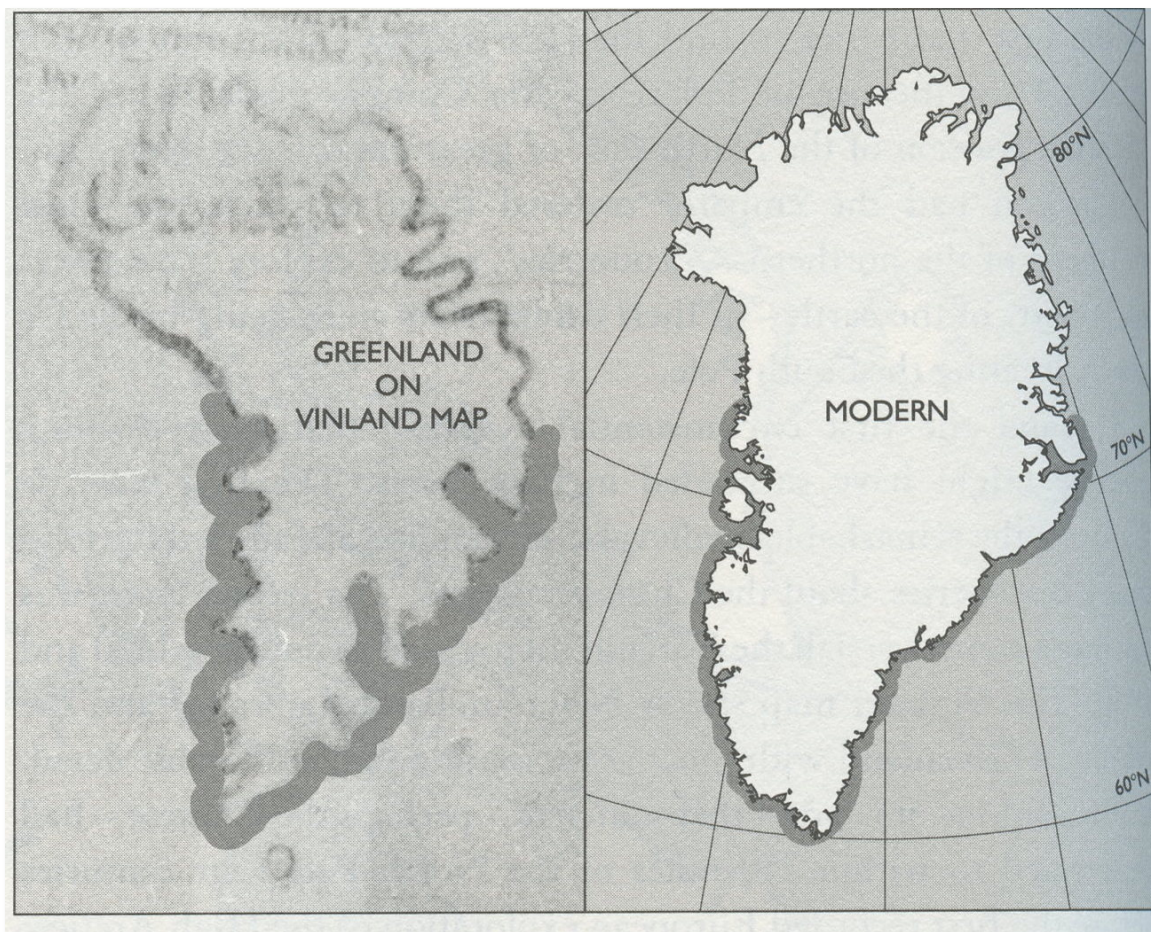
*The Vinland mappamundi, 1440[?], #243*



*Detail: The northwest portion of the Vinland mappamundi*

An extremely realistic Greenland shown in the extreme northwest and west of the 1440[?]Vinland map (#243) where there are laid down three great islands, named respectively *isolanda Ibernica*, *Gronelada*, and *Vinlandia Insula a Byarno re et leipho socijis*, with a long legend on Bishop Eirik Gnupsson's Vinland voyage above the last

two. The Icelandic name *Groenland*, in variant forms (including the latinization *Terra viridis*), is used in all early textual sources. The name was introduced into cartography by Claudius Clavus (1427) as *Gronlandia*. This fairly accurate depiction of Greenland on this *Vinland* map, shown as an island when, as can be seen here in this monograph, all the other maps from this period displayed Greenland as a peninsular extension of Europe, is one of the observations that has led to the conclusion that this map may be a 20<sup>th</sup> century forgery. The accuracy of the outline of Greenland indicates knowledge of the northern portion of Greenland not known to have been surveyed until 1896 and not circumnavigated until the 20<sup>th</sup> century.







*The world map in the Florence manuscript of Martellus' Insularium illustratum (1489) showing Greenland as an extension of Europe (#256)*



*Detail from Martellus/Roselli World Map, 1489 showing Greenland as a long narrow peninsula*

*Biblioteca Nazionale Centrale, Landau, Italy, Carte Rosselli, planisfero (#256)*

The Zeitz map of 1470 (*below*, #251) shows Greenland erroneously as belonging to Eurasia, but otherwise it is placed correctly long beyond and to the southwest of Iceland. It thus represents the so-called *Zamoiski-type*, referred to by the historian Father Josef Fischer as the second version, while the *Wolfegg MSS* by Nicolaus Germanus and the *Ulm* editions which are close to it constitute the third version according to which Greenland is mistakenly placed north of Norway. Fischer discussed the dating of the map of the North and held that it could not be dated

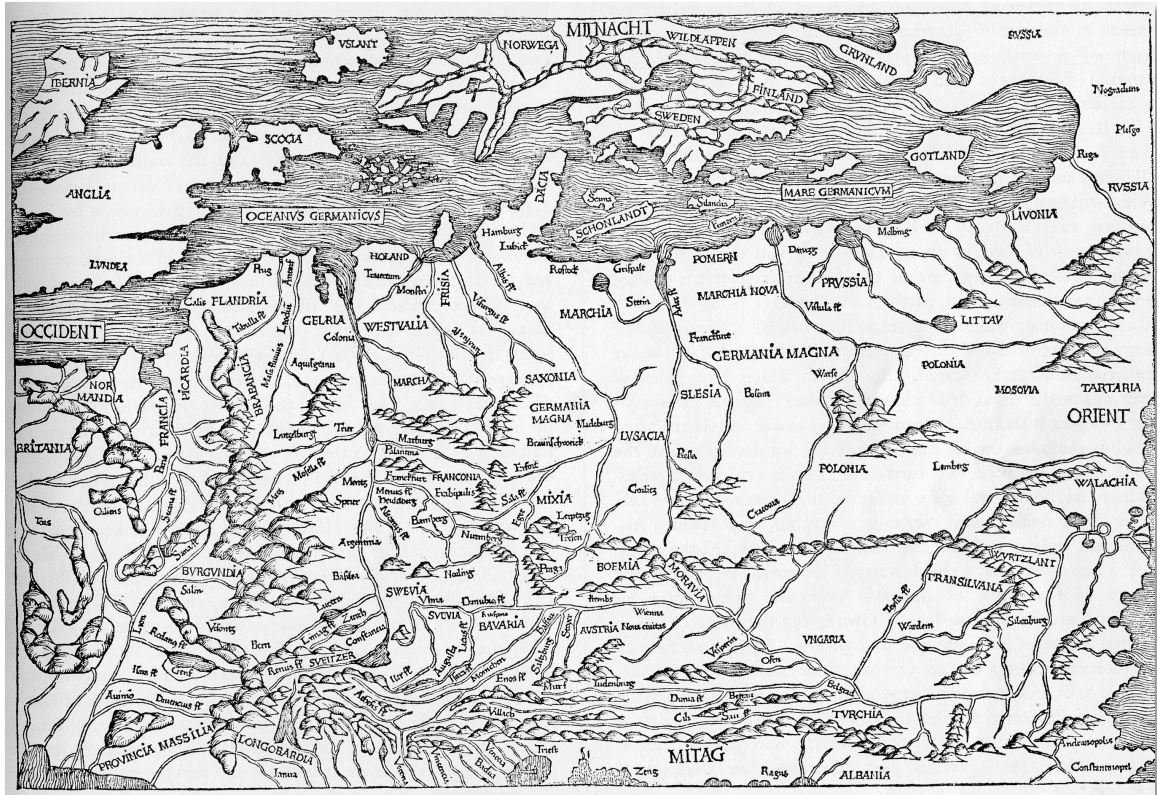


before 1474 since Holstein became a duchy only in that year. A similar configuration can also be found on the 1506 Contarini map (#308) where Greenland is labeled *Engronelant*, and which is placed north of Scandinavia as a peninsula of that land.



The 1470 Zeitz world map (oriented with South at the top) #251



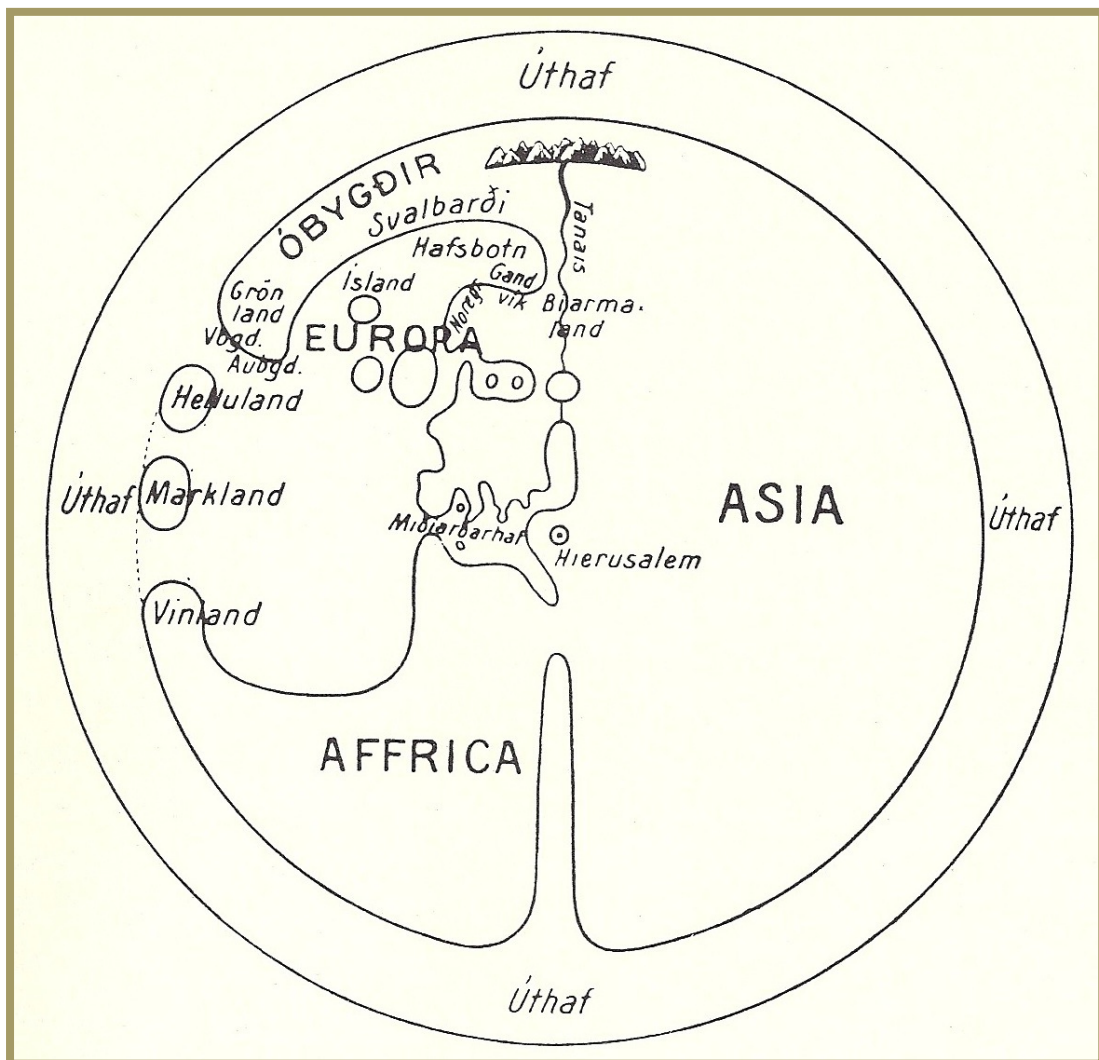


Map of Germania from Schedel's *Liber cronicarum*, 1493 displaying GRVNLAND [Greenland] as part of a peninsula extending from northern Europe



Detail: misplaced GRVNLAND [Greenland] east of Norway, Sweden, Finland on the extended European peninsula

Due to the fact that virtually no maps have survived from the original settlement of Greenland, the Danish historian, A. A. Björnbo, who wished to illustrate this period in his history of Greenland cartography, was obliged to construct a world map from the available cosmographical literature. The original reconstruction was first published in *Cartographia Groenlandica*, 1912 (#244). Here Greenland can be seen as either an extension of Europe or Asia (Eurasia).



A map by A. A. Björnbo that shows how the medieval Norse saw their geographical world (1912)

Björnbo, A. A., *Cartographia Groenlandica*, Meddelelser om Grönland, No.48 (#244)

Erik Vandvik, in *Latinske dokument til norsk historie fram til dr 1204* (1959), argues that 12<sup>th</sup> century Norwegian clerical messengers would probably not have regarded Greenland as an island. Although Adam of Bremen (about 1075) thought of both Greenland and Vinland as islands, to him and his contemporaries the term "island" implied barbarity and remoteness, not necessarily a smallish piece of land surrounded by water on all sides. A century after Adam, the *Historia Noruegice*

(written around 1170 by a Norwegian cleric) saw Greenland as part of a large northern landmass, and *The King's Mirror* (about 1250) likewise assumed that Greenland was part of that mainland. A geographical survey in an Icelandic manuscript, *Veidarvisir ok borgaskipan* (composed about 1300 and partly based on a guidebook written in Iceland before 1150), tries to locate *Helluland*, *Markland*, and *Vinland* in the ocean south of Greenland and hypothesizes that while *Vinland* may be an African peninsula, the other two names refer to islands. On the basis of these and other literary sources, A. A. Björnbo drew a map of how the medieval Norse saw their geographical world. This map shows Greenland as part of a vast, solid, eastward-connected northern landmass. Both *Helluland* and *Markland* are islands, while *Vinland* merges with the African continent. The stretch of northwestern Norway still known as *Halogaland* was also at the time widely thought to be an island.

Later sources and common sense lend some support to Vandvik's argument. Greenland is huge and extends so far into the polar regions that circumnavigation was impossible until the twentieth century. As late as 1741, the Norwegian Greenland missionary Hans Egede wrote:

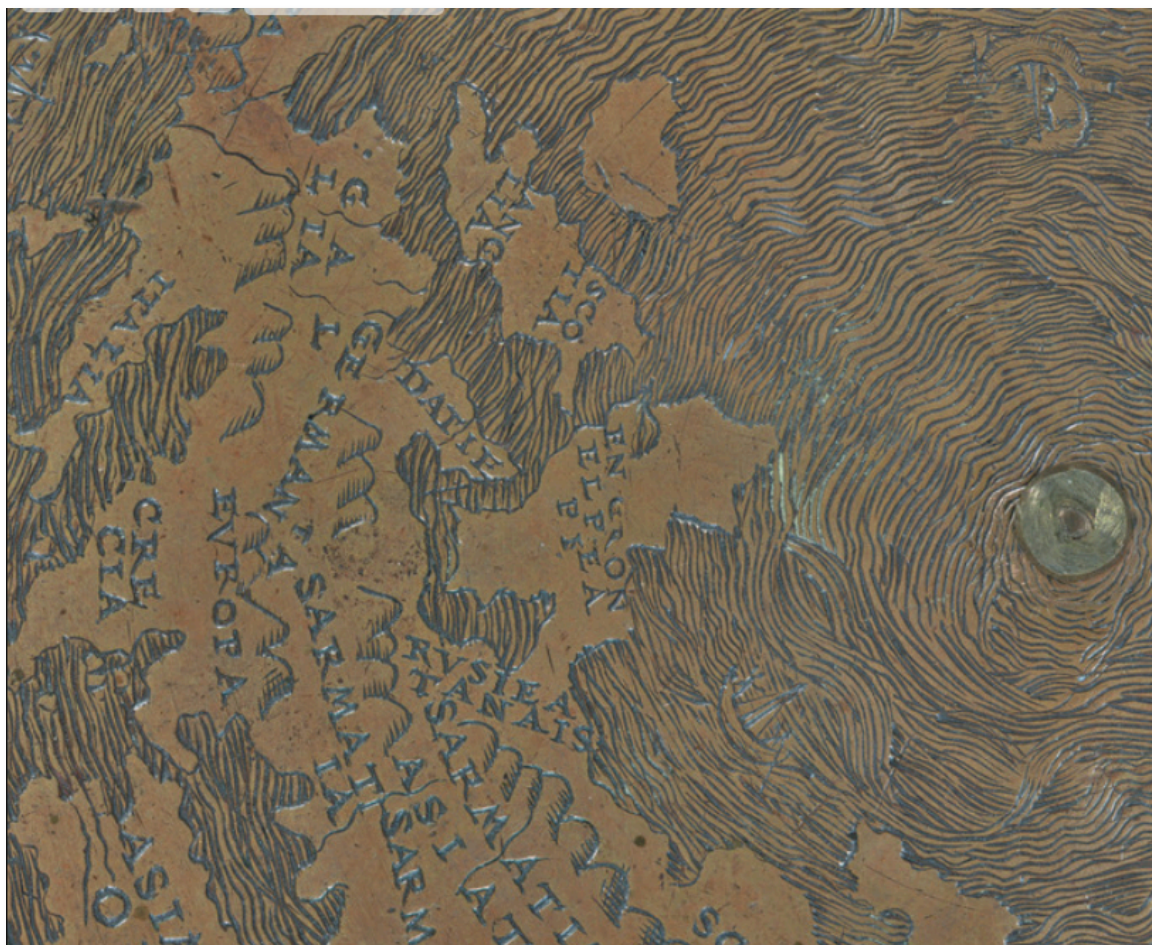
The western side [of Greenland] is known to a latitude of seventy-some degrees. Whether Greenland is a big island, or borders in the north on other countries, nobody has yet been able to ascertain; but we may safely conclude that it must border on America on the northwestern side, for between America and Greenland stretches the ... bay which the sea charts call Strat-David after an Englishman, who Anno 1585 is supposed to have been the first who found [it], and which is still visited annually by them and other nations for the sake of the whale-fishing.



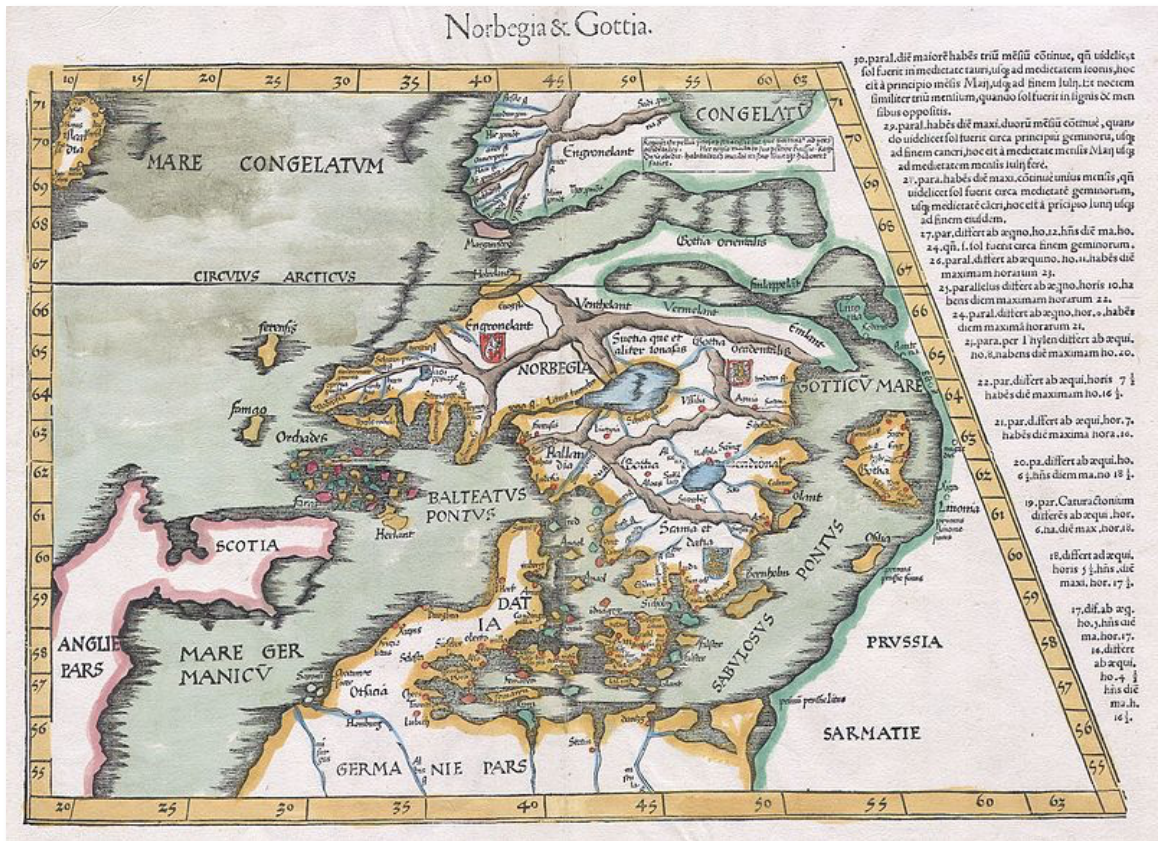
In the north of Europe on the 1490 "Columbus" (a.k.a. the "Paris") map (#257) is the European peninsula Groenlant, bearing the legend:  
*Hic habitat populus monstuosus* [here monstrous people live].



Below, on the 1502-07 *Lenox* globe (#314), Greenland, using the unusual name *EN GRON ELPIE APE* which combines two names for Greenland, *Gronland* and *Pilapelant* is portrayed as a peninsula extending from northern Europe.



*Detail of the Lenox globe showing the peninsula EN GRON ELPIE APE (#314)*



Above is an important early (1541) map of Scandinavia by cartographer Martin Waldseemüller. It is heavily based on the 1427 map by Claudius Clavus, which appeared in the Ulm edition of Ptolemy's *Geographia*. The most notable difference is the addition of armorial shields for the Scandinavian countries. In this map, much of the geography is conjectural at best. Iceland, Norway, and Sweden are nearly unrecognizable. At the top of the map, Greenland, labeled *Engronelant*, appears connected to the mainland by a narrow land bridge. The text on the right describes the lengthening hours of daylight as a traveler moves north.



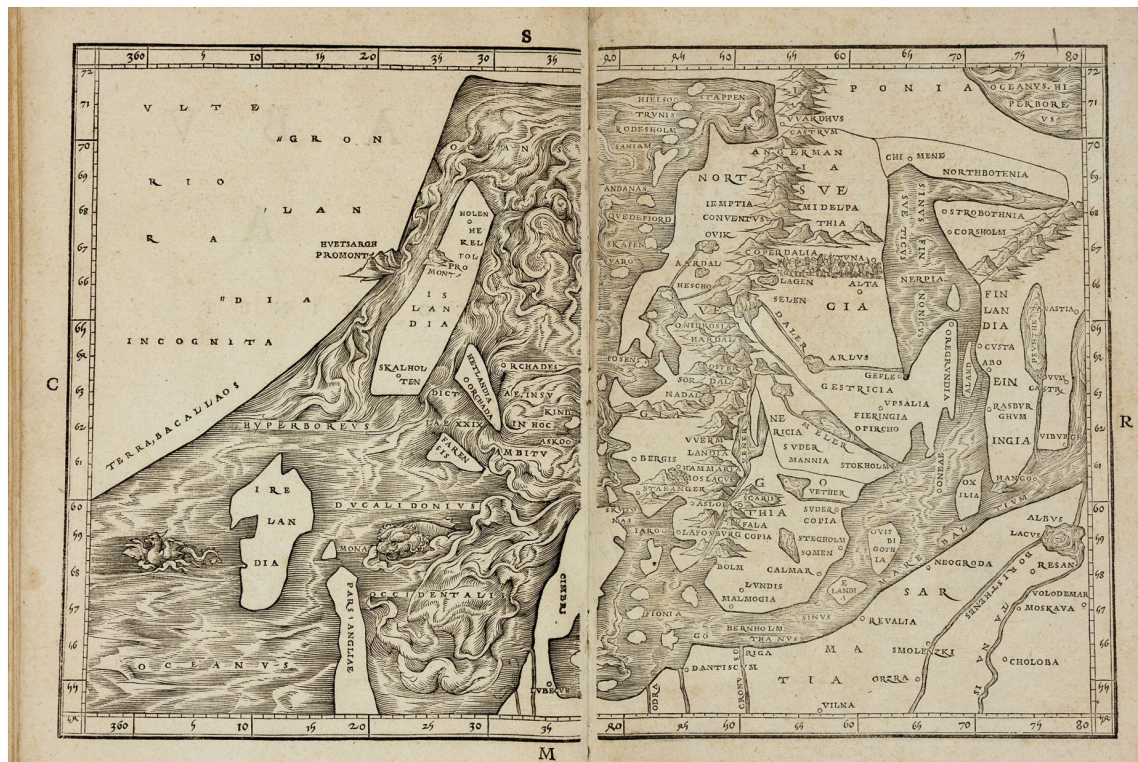


*Greonland [Greenland] on Laurentius Frisius' Ptolemaeus Argentorati, 1522*

At the beginning of the 16<sup>th</sup> century the northern countries were a very unknown region to most people in southern Europe. The information about the North was based on the descriptions written in the Antiquity and Medieval times, and depicted on few maps. The region was often described as an island in a nameless northern sea, or as an east-to-west "peninsula" resembling the shape of an oak leaf. Before Olaus Magnus' map, the most important earliest maps of the Nordic countries – that have survived to our days – were in addition to the map published in 1532 by the Bavarian Jacob Ziegler and those that appeared in the numerous printed "Ptolemy Editions". They were based on the map compiled in 1427 by the first Nordic cartographer, the Dane Claudius Clavus, and improved by the German Nicolaus Germanus. The cartographic representation of the North was, however, quite faulty and far from reality. In later manuscripts of Ptolemy's *Geography* the map of the north appears in two different versions. One version depicts Greenland as a peninsula directly west of Scandinavia and connected to it with a speculative land bridge across *Mare Congelatum*. Iceland is located between Greenland and



Scandinavia. A second version shows Greenland directly north of Scandinavia. Iceland is moved farther west and farther north.



Jacob Ziegler, Strasburg, Peter Schoeffer, 1532, woodcut map of Scandinavia from Ziegler's *Quae intus continentur ....* printed from 2 woodblocks.

This very scarce and important early map features Scandinavia and Greenland and names Finland for the first time. A huge Greenland is connected to northern Europe by a land bridge. It is part of a complete suite of eight maps illustrating Ziegler's highly influential attempt at a scientific mapping of the Holy Land, representing the first atlas devoted to that region. The work also contains the first map of Scandinavia not to be entirely derived from Ptolemy's geography and regarded as the first new map of the northern regions since the *Ulm Ptolemy* of 1482, printed 50 years earlier. This map includes an enormous continent (Greenland), the southernmost portion of which is labeled *Terra Bacallaos*, [the Land of Codfish] - likely referring to early fishing activities off the coast of Newfoundland.

During a period of fifty years the map printed *Ulm Ptolemy* 1482 constituted the only type on which the countries of the North were delineated. But in 1532 a new type was introduced through a map published by the Bavarian theologist Jacobus Ziegler in a work with the following long title: *Quae intus continentur*.

According to a statement in the text, the data for this new map were furnished by not less than four Scandinavian prelates, whom ecclesiastical and political disturbances had brought to the papal court during a visit of Ziegler to Rome. It is remarkable that the author, for his information on *Gronlandia Chersonesus et insula Tyle*, gives references not to Walkendorf, who had worked with such energy for the rediscovery of the colonies in Greenland, but to the last named two Swedes.

Ziegler, according to his own avowal, calculated the numerous latitudes and longitudes given in this work, from information respecting the reciprocal distances and azimuths of the most important places in the Scandinavian countries. The chapter on *Schondia* contains a tolerably extensive geographical description of *Gronlandia*, *Islandia*, *Hetlandia*, *Farensis*, *Laponia*, *Nordvegia*, *Svecia*, *Bothnia*, *Ostrobothnia*, *Gothia*; *Finlandia*. Under *Gronlandia* some interesting communications about *Antoninus Ioannes Cabotus* are inserted. His report that he had encountered ice during the month of July in the Greenland Sea is dismissed with the positive assertion that this could not have been possible even at the pole, at that time of the year.

If this map is to be considered as a faithful copy of the original, it shows that the German theologist and the Northern prelates were not particularly well skilled in the art of drawing maps. As regards the principal features of the Scandinavian peninsula, their map, however, denoted considerable progress, and the legends on it, or in the text, may generally, without difficulty, be identified with known localities. Unfortunately only one name is to be found on the eastern coast of Greenland, that of a high mountain, *Hvetsargh promontoriune*. Both Greenland and Iceland are, besides, far less accurately drawn here than on the map in the *Zamoiski codex*. In Scandinavia the direction of *Kölen* is tolerably well represented; several of the great Swedish lakes, *Vener*, *Melar*, *Vether*, *Somen*, *Selen* [Siljan] are laid out on the map, and we have here for the first time a map, though a rough one, of Finland.

Although new astronomical measurements were unavailable, Ziegler tried to base his data on at least two different parallel sources and to remove or revise geographical information he thought to be incorrect. Although firmly based on the geographical work of Ptolemy, Ziegler's cartography is thus more refined than his contemporaries. Ziegler was also one of the first to depict magnetic declination in his maps, illustrating the difference between true and magnetic polar directions.

Ziegler's cartography had a direct influence on numerous early mapmakers, including Schöner, on his globe of 1533 (#328), Mercator on his 1537 world map, Münster on his 1540 map of Scandinavia (#381) and Gastaldi's 1548 map of the same region. Ziegler had access to information from the voyages of John Cabot and the writings of Peter Martyr, as well as geographical sources from *Scandinavian Prelates* at the Papal court whom he met in Rome, including Johannes and Olaus Magnus.

Ziegler is the first to give the correct north-south orientation to the Scandinavian peninsula and to introduce the mountainous divide between Norway and Sweden; but the land link to Greenland is retained and the author is still struggling after the outline of the Baltic Sea. Seven years after the first edition of Ziegler's work another map of the Northern countries was published in Venice by the Swedish Bishop Olaus Magnus (#366).

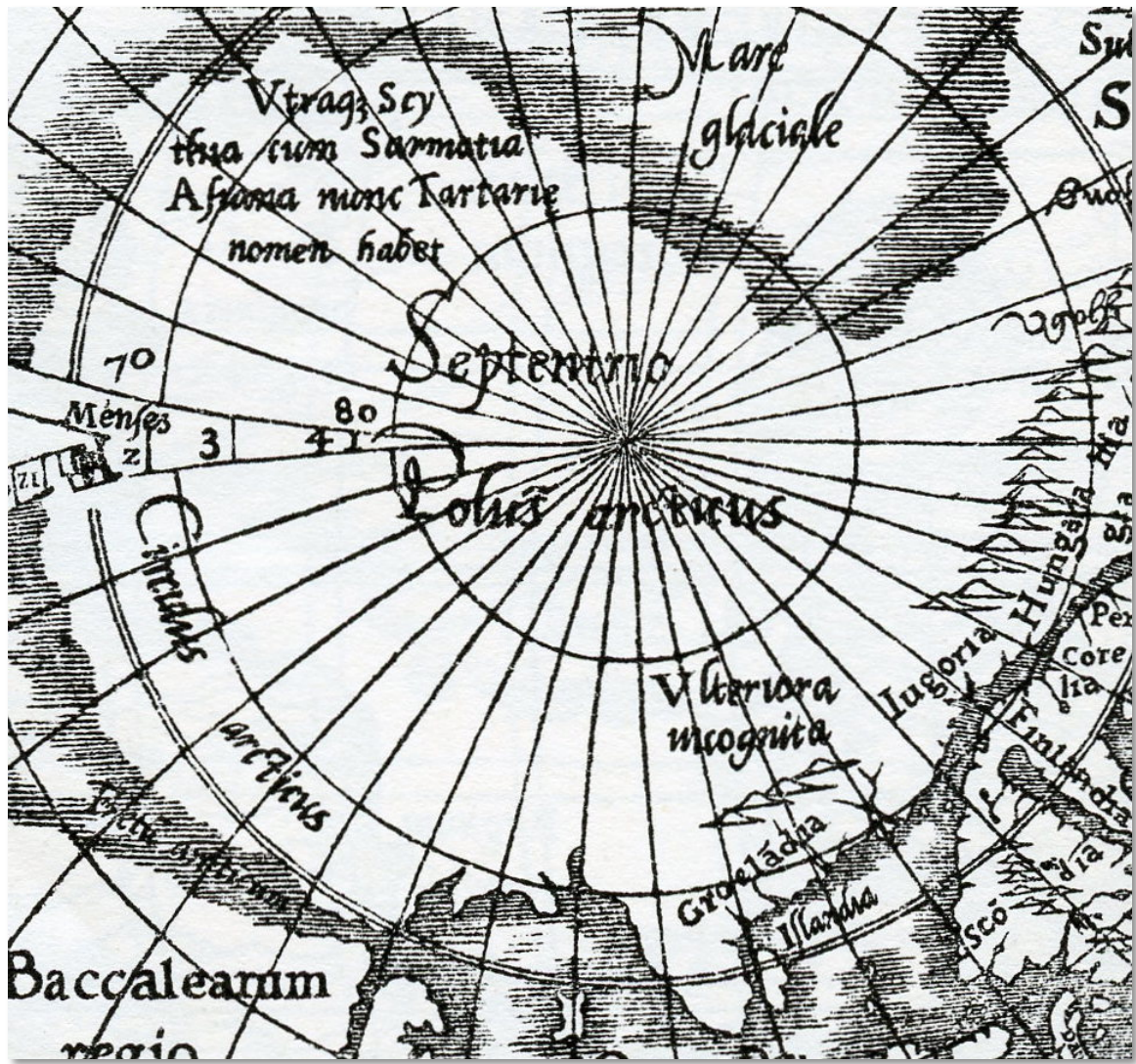




*Tabula Nova Orbis/Diefert Situs Orbis Hydrographorum Ab Eo Quem Ptolomeus Posuit by Laurent Fries, 1535, showing Greenland as a European peninsula*







Grocladia [Greenlan] on the 1538 polar world map by Gerard Mercator. The 1538 cordiform map of Mercator makes it a peninsula of an arctic region connected with Scandinavia.

The great *Historia* of Olaus Magnus, as for a long time the leading authority on the northern geography, as well as on the Scandinavian chronicles, gives us some distinct rendering of this northern geographical problem. Nordenskjöld says that it embodies the views of the northern geographers in separating Greenland from Europe, which was in opposition to those of the geographers of the south of Europe, who united Greenland to Scandinavia.





*Carta marina et Descriptio septentrionalium terrarum ac mirabilium rerum in eis contentarum, diligentissime elaborata Anno Domini 1539 Veneciis liberalitate Reverendissimi Domini Hieronimi Quirini by Olaus Magnus (#366)*

Olaus Magnus (1490-1557) did not like the map of Scandinavia in the 1482 edition of Claudius Ptolemy's *Geographia*. The classic Ulm text, a translation of the Greek's principles of geography and cartography formulated in the second century, purported to have the most current and accurate maps available at the time and was a reference work of great scholarly importance. But Olaus knew the map of Scandinavia was hopelessly wrong. To correct the erroneous ideas that most Europeans, especially southern Europeans, had about his native land, he made his own map. Published in 1539, the *Carta Marina*, a wall map in nine sheets, was the first large-scale map of any part of Europe.

The full title of the map translates as "A Marine map and Description of the Northern Lands and of their Marvels, most carefully drawn up at Venice in the year 1539 through the generous assistance of the Most Honorable Lord and Patriarch Hieronymo Quirino." It was a great improvement on earlier maps of Scandinavia, certainly the largest and most detailed to its time and generally much more accurate than its predecessors. The title makes clear that Olaus intended his map to be used by navigators, as do the navigational elements depicted on the map: four large



compasses, *rhumb* lines indicating directions from them, a pair of dividers, and distance scales.

The left-hand half of the map is taken up with the Atlantic Ocean; running from bottom to top, we see northern Scotland; the overdrawn archipelagos of the Orkneys, Shetlands, and Faeroe islands; and finally Iceland, with a small inset in the top-left corner of the southern tip of Greenland.



In this northwest corner, the wreckage of ships testifies to the dangers of sailing near Greenland. *For the wind Circius is so violent in northern waters, especially when it coincides with the full moon, that all who are sailing there must fear its horrifying and lethal effects*, Claus writes. (Magnus 1996, I: 103-04.) Nearby, on the top of Hvitsark Rock, is a compass. According to Olaus, this place was first settled in 1494 by Pining and Pothorst, two pirates chased north by the Danes. He writes: *They lived there outlawed with their fellow-rovers and inflicted many atrocities on every seafarer, whether sailing close at hand or at a distance*. (Magnus 1996, I: 104.) The pirates made the compass to help determine routes for their “profitable plundering forays.” Note that the latitude of Hvitsark is 83°N. In southern Greenland a pygmy fights against a big man. *The little dwarf fearlessly attacks his bigger opponent and triumphs in his victory*, Claus explains, *for at every opportunity he assaults taller men with no less courage than if he could boast of a giant’s might and so have the upper hand*. (Magnus 1996, I: 105.)

Grœnlandia Pars and Grœnlandia Pars appear on the map in the upper left and upper center.





*Typus Orbis Universalis* [from: *Geographia Universalis vetus et nova...*], 1540 by Sebastian Münster. Here Greenland hovers above Canada, stretches over Europe, and connects to Asia, which in turn extends north of America and nearly meets Greenland again, on the west. This was the result of thinking that Iceland, Newfoundland, and some northern areas of Canada comprised a single land mass. (#377)





1540 map by Sebastian Münster, showing Gronlant as a peninsular extension of Scandinavia. Thomas Kitchin made a copy of this map in 1770 at a time when the label "Schinlandia" was no longer used.

In Pierre Desceliers' 1550 and 1553 world maps the northern coast of Europe is depicted in a distinctive style for the unknown coastlines: a scalloped shore with short rivers between the peninsulas. The descriptive text off the coast of Greenland is one of the most interesting on the map. Desceliers explains that while some cosmographers have joined the New World to Asia, this opinion is incorrect and is not to be followed. It is not clear how Desceliers arrived at this conclusion, but in doing so he was well in advance of some contemporary cartographers, including Caspar Vopel (#364), who depicts the New World as joined to Asia in the 1558 edition of his world map. The scale of latitude shows that the map reaches just beyond 84° N; the horizontal line that cuts across Iceland the top of this section, labeled *Arctique*, is the Arctic Circle. The white elephant in *Groullande* [Greenland] ultimately derives from a representation of a walrus on Martin Waldseemüller's *Carta marina* of 1516 (#320). Evidently either Waldseemüller or his source had heard that the walrus had tusks like those of an elephant, and, lacking additional information about the creature's appearance, decided that the rest of it must look like an elephant as well. Desceliers' direct source for his elephant-like walrus was no doubt the depiction of the creature on the second modern world map in the 1522, 1525, 1535, or 1541 edition of Ptolemy, a book that was one of the principal sources for many of the long legends on his map. Desceliers shows two types of thatched huts in *Groullande* (i.e. Greenland, which is here mistakenly attached to Scandinavia)



- different from the primitive huts he depicts in Canada and elsewhere - but his source is not clear. Tents are depicted in northern Scandinavia on Olaus Magnus' *Carta marina* of 1539 (#366), for example, but they are not thatched.



Pierre Desceliers' Planisphere, 1553 detail: Scandinavia, showing Groullanda [Greenland] as an extension of Europe (oriented with South at the top) #378





Detail of Desceliers' 1550 world map showing Groullande [Greenland] as an extension of Europe, populated with bear, deer, elephant and thatched huts (oriented with South at the top) #378

A study of the early *mappaemondi* of the Middle Ages reveals that the first to show any close resemblance to the actual outline of Greenland, is that by Nicoli and Antonio Zeno which, though based on voyages made near the close of the 14<sup>th</sup> century, was not published until a century and a half later (1558) at Venice. Nicolo's narrative shows that he sailed from Svalbard or Spitsbergen (then *Islanda*) and in a northerly direction, which with compass correction would be north northwest. That would bring him against the southern margin of the frozen Arctic Ocean, and force him to follow it to the Greenland coast near Gael Hamke Bay, a position where later explorers have found a comparatively easy landing place. In the narrative Nicolo described finding in East Greenland many things which later explorers had not discovered there: a populous settlement of Eskimos, a monastery of Catholic friars, volcano in eruption, hot springs with which the friars heated their houses and the church, summer shipping connection with Scandinavia and Spitsbergen, etc. After his stay in East Greenland Nicolo Zeno skirted the East Greenland coast and arrived at *Frisland* [Iceland]. Some years later his brother Antonio skirted the Greenland West Coast and prepared the map, which with interior mountains removed. According to William Herbert Hobbs, that they produced a true magnetic map of the island conclusively proves them to have been honest and reliable explorers who were far in advance of their age. Their map was accepted by the great geographers of



their time and copied onto their own maps, by Ruscelli in 1561, Mercator in 1569, and Ortelius in 1574.

However, so soon as the astrolabe had come into use to fix latitudes at sea, the Zeno map fell into discredit because of the false latitudes that had been superimposed up on it by Nicolo the narrator. Martin Frobisher used the Zeno map on his first westward voyage in 1576, and he made his "Frobisher Strait" cut across south Greenland, though it was Frobisher Bay on the North American east coast. This false location appeared on a number of later maps; and, in general, the Greenland maps of the 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> centuries (e. g., those of Hondius in 1597, and 1608, of Danckertz, Comeille and Tavernier in 1628, and that of Bellin in 1765) are all of them, save for the orientation, inferior to the Zeno map. This was despite the fact that very important new exploration had taken place – Henrik Hudson in 1607 on the east coast, and John Davis (1584) and William Baffin (1616) on the western. Later cartography of Greenland belongs to the modern period, and resulted from exploration carried up the waters west and north of Greenland in attempts to discover, first, a Northwest Passage to Asia, and, later, the Northern Pole of the earth. Latest of all to be surveyed and mapped has been the northern East Greenland coast, that to the north of Gael Hamke Bay. This has been surveyed and the evolution of its cartography been treated in a superb work by Denmark's great explorer-geologist, Dr. Lauge Koch.



*Map of the northern regions by Nicolo and Antonio Zeno, 1558 showing Engronelant and Grolandia [Greenland] as an extension of Scandinavia and other, mythical islands such as Frisland, Icaria, Podalida, Neome, Estland and "Islanda" [Iceland]*



The *Zeno* map shows Greenland attached at its northern end to the continent of Europe. In the 16<sup>th</sup> century, cartographers were perplexed about where to place Greenland. Part of the problem arose from the extreme magnetic variation in this region; close to Greenland the difference between magnetic north and true north is as much as 30°00' to the west, and in the Labrador Sea it increases up to 40°00'. Consequently, as mariners sailed west in the high latitudes of the Atlantic they found that their position did not correspond with where they ought to be according to the chart. This confusion, plus the inability to determine longitude, prevented any accurate determination of Greenland's position.

The chief argument for its authenticity is that there had been nothing drawn and published up to that time which could have conduced, without other aid, to so accurate an outline of Greenland as it gives. In an age when drafts of maps freely circulated over Europe, from cartographer to cartographer, in manuscript, it does not seem necessary that the search for prototypes or prototypic features should be confined to those that had been engraved.

With these allowances the map does not seem to be very exceptional in any feature. It is connected with northwestern Europe in just the manner appertaining to several of the earlier maps. Its shape is no great improvement on the map of 1467, found at Warsaw. There was then no such constancy in the placing of mid-sea islands in maps, to interdict the random location of other islands at the cartographer's will, without disturbing what, at that day, would have been deemed geographical probabilities, and there was all the necessary warranty in existing maps for the most willfully depicted archipelago. The early Portuguese charts, not to name others, gave sufficient warrant for land where *Estotiland* and *Drogeo* appear.

Mention has already been made of the changes in this map, which the editors of the Ptolemy of 1561 made in severing Greenland from Europe, when they re-engraved it. The same edition contained a map of *Schonlandia*, in which it seems to be doubtful if the land that stands for Greenland does, or does not, connect with the Scandinavian main. That Greenland was an island seems now to have become the prevalent opinion, and it was enforced by the maps of Mercator (1569 and 1587), Ortelius (1570, 1575), and Gallæus (1585), which placed it lying mainly east and west between the Scandinavian north and the Labrador coast, which it was now the fashion to call *Estotiland*. In its shape it closely resembled the *Zeno* outline. Another feature of these maps was the placing of another but smaller island west of *Groenlant*, which was called *Grocland*, and which seems to be simply a reduplication of the larger island by some geographical confusion, which once started was easily seized upon to help fill out the arctic spaces.

Apart from the pragmatic problem of compass variation, there was a philosophical problem about Greenland's inhabitants. 14<sup>th</sup> century Scandinavian stories relate the invasion of Norse settlements in Greenland by a large group of Eskimos [Inuits]. A battle was fought in which the Eskimos were the victors. If, as it was believed, all mankind originated from one source, then the Eskimos could have reached Greenland only by way of some kind of land-bridge from Eurasia. The various postulations about this land-bridge account for the unusual locations for Greenland on maps of this period; sometimes it was attached to Europe, other times it was attached to the northeast part of Asia (as on the Johannes Ruysch map of 1507), and on occasion it was an appendage to a polar continent. When the *Zeno*

map was introduced into the *Ptolemy Atlas* of Girolamo Ruscelli in 1561, an important change was made: Greenland was severed from Norway, resulting in a strait of open water between the two. This new depiction of Greenland was repeated thereafter in many other editions of the Ptolemy atlas.

According to Captain Arlington Mallery in *Lost America*, the *Zeno* map shows Greenland with no ice cap. Possibly indicating that Greenland had a temperate or semi-glacial climate at the time this map was drawn. It correctly shows the extremely mountainous character of northern and southern Greenland, together with a flat central region.



*Map of sub-glacial Greenland*

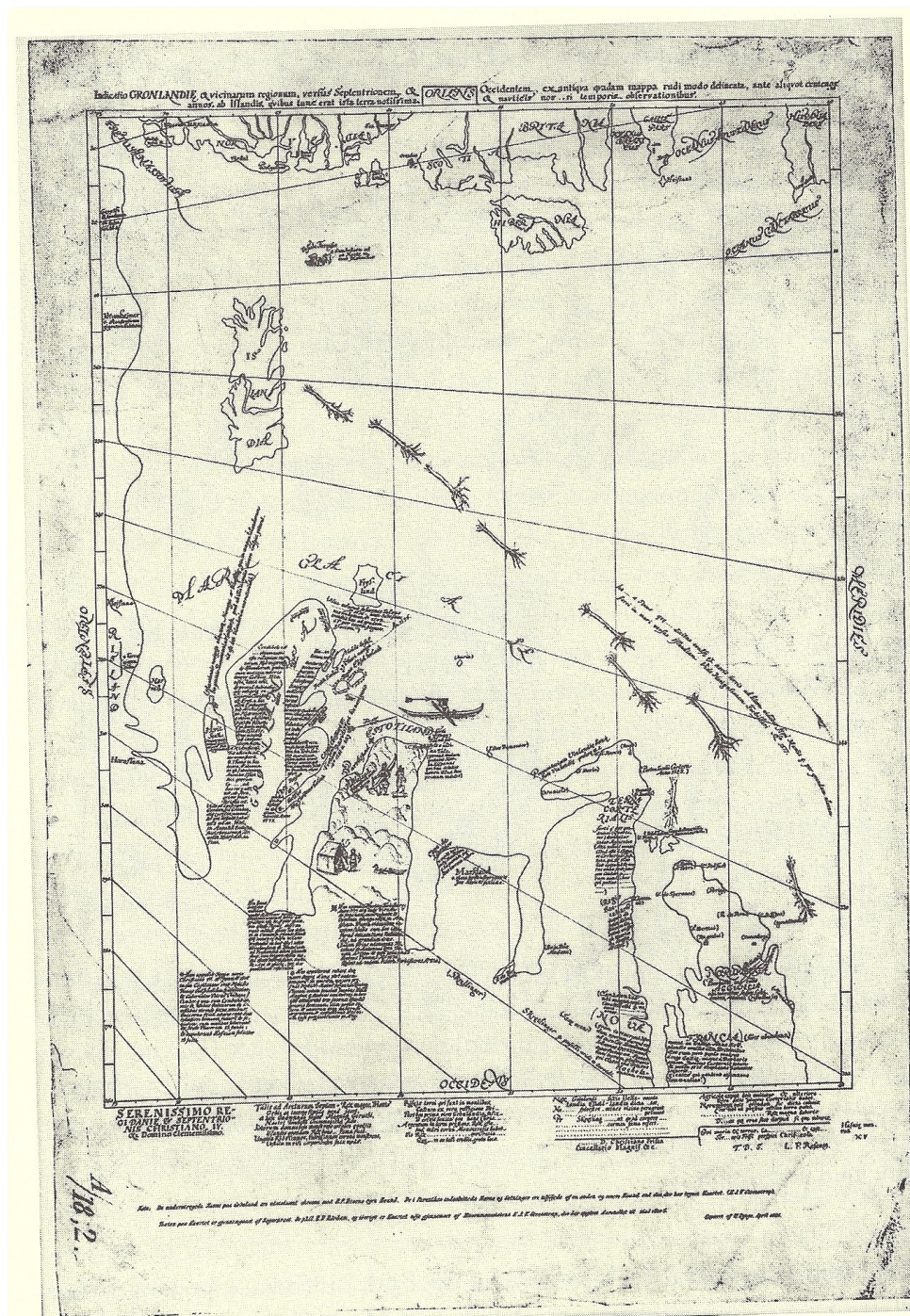


It was just at this time that the oldest maps which display the geographical notions of the saga men were drawn, though not brought to light for many years. Justin Winsor notes two such of this time, and one of a date near forty years later. One marked *Jonas, Gudmundi filius, delineavit, 1570*, is given as are the two others by Torfæus in his *Gronlandia Antiqua*. They all seem to recognize a passage to the Arctic seas between Norway and Greenland, the northern parts of which last are called *Risaland*, or *Riseland*, and Jonas places *Oster Bygd* and *Wester Bygd* on the opposite sides of a squarish peninsula. Beyond what must be Davis' Straits is *America*, and further south *Terra Florida* and *Albania*.

If this description is compared with the key of Stephanius' map, next to be mentioned, while we remember that both represent the views prevailing in the north in 1570, it is hard to resist the conclusion that *Vinland* was north even of Davis' Straits, or at least held to be so at that time.

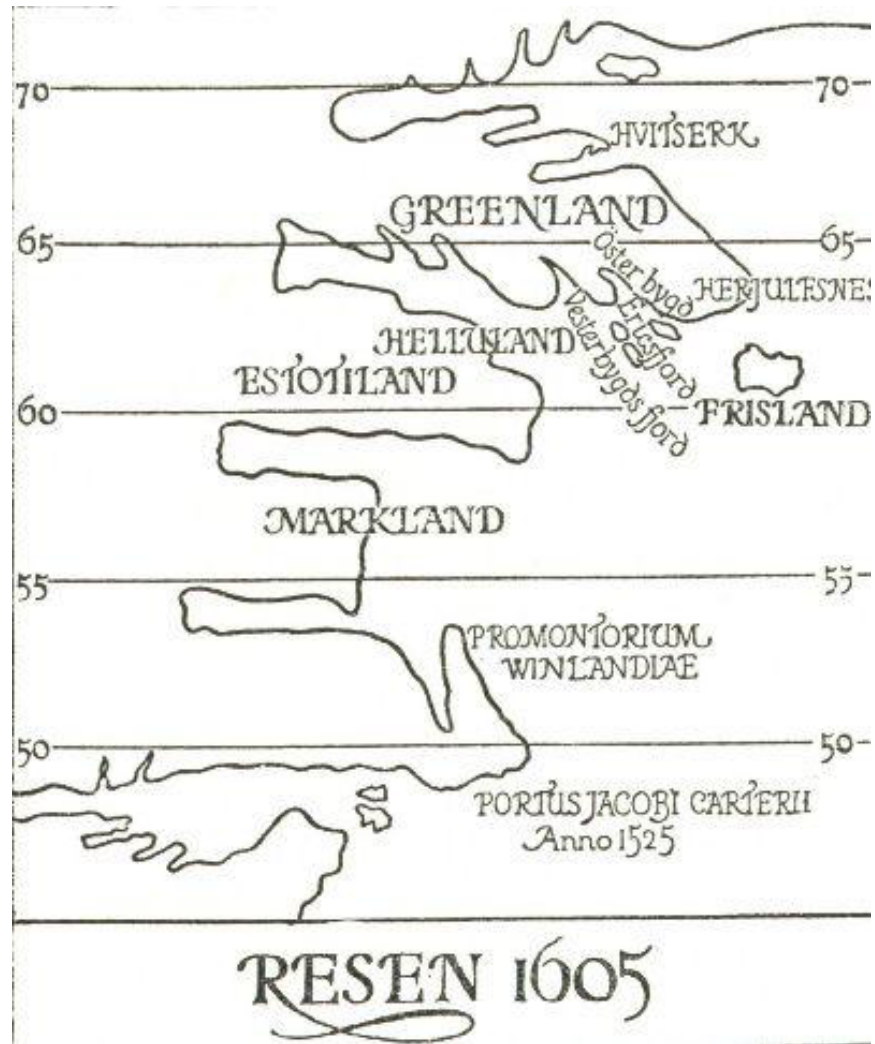
The second map, that of Stephanius, is reproduced herewith, dating back to the same period (1570); but the third, by Gudbrandus Torlacius, was made in 1606. It gives better shape to *Gronlandia* than in either of the others.

A map made in September 1605 by a Dane, Hans Poulsen Resen. Resen had a vivid interest for Iceland and its ancient history. Resen first served as professor at the University of Copenhagen and later Bishop of Zealand [the large island on which Copenhagen is located]. His map was made shortly after a Danish expedition to Greenland in the summer of 1605 to search for the Norse settlements there. This map also shows *Vinland* as a long narrow peninsula extending north. Resen stated that his map was based on ancient sources. Later scholars have pointed out that such claims were commonly made to validate work. It is clear, however, that Resen has incorporated information gained from the voyages of Martin Frobisher, 1576 to 1578, and those of John Davis in 1585 to 1587. The *Resen* map also has extensive comments in the margins.



Copy by made by W. Lyngé of a map attributed to the Danish theologian Hans Poulson Resen, 1605, manuscript in the Royal Library in Copenhagen, Denmark (oriented with East at the top). Groelandia [Greenland] is shown as a large peninsula on the left. (#243)







The Skálholt Map, 1590 map by Sigurd Stefánsson

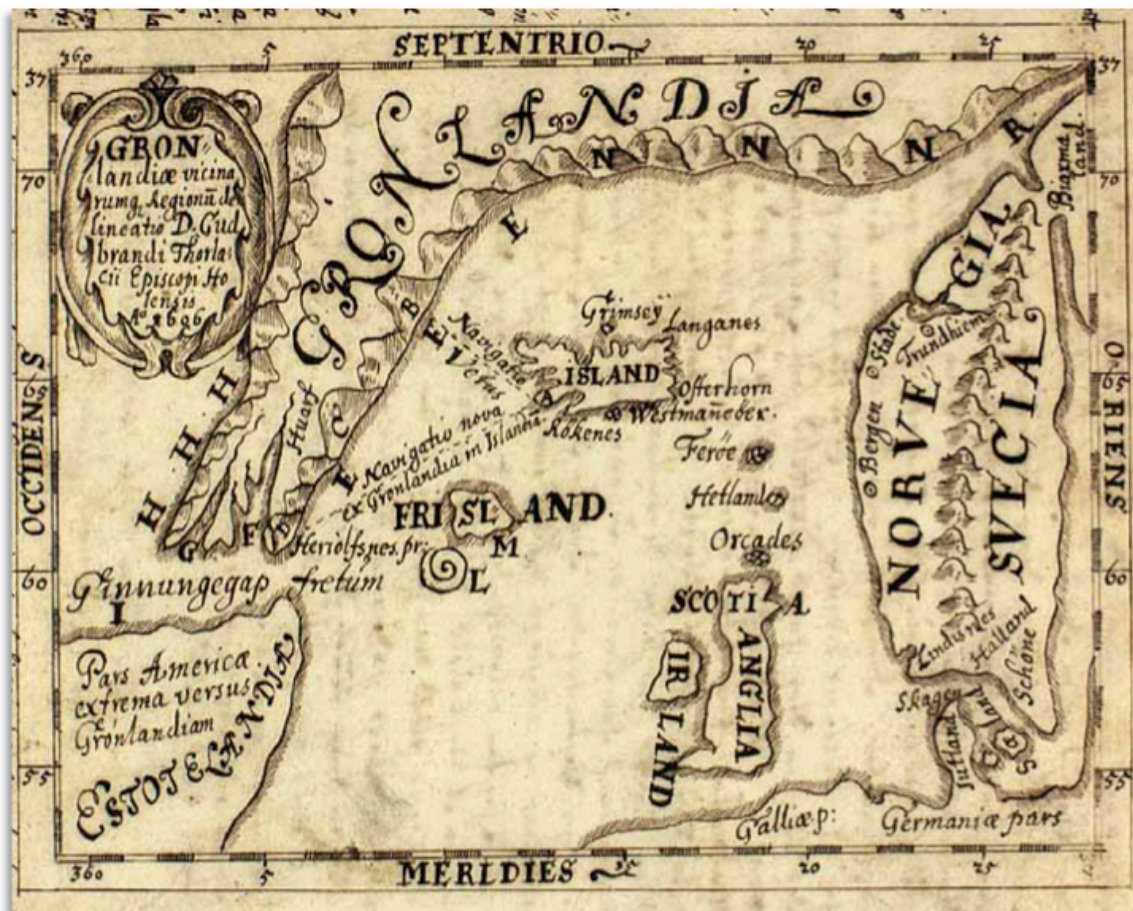
Stefánsson attempted to plot the American locations mentioned in the Vinland Saga on a map of the North Atlantic. Stefánsson's original is lost; this copy dates from 1669, and was included in description of Iceland by Biørn Jonsen of Skarsaa. The map mixes real, fictional and rumored geography. In its southeast corner, the map shows Irland and Britannia, and to the north of the Orcades [Orkney Islands], Hetland [Shetland Islands], Feroe [Faroe Islands], Island [Iceland] and Frisland, a persistent phantom island. Here Greenland is depicted as an extension of Europe. (#431.6) Kongelige Bibliothek, the Danish Royal Library.



**KEY:**

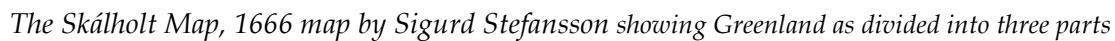
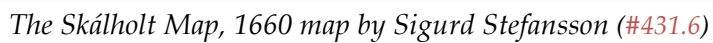
- A. This is where the English have come and has a name for barrenness, either from sun or cold.
- B. This is near where Vinland lies, which from its abundance of useful things, or from the land's fruitfulness, is called Good. Our countrymen (Icelanders) have thought that to the south it ends with the wild sea and that a sound or fjord separates it from America.
- C. This land is called Rüseland or land of the giants, as they have horns and are called Skrickfinna (Fins that frighten).
- D. This is more to the east, and the people are called Klofinna (Fins with claws) on account of their large nails.
- E. This is Jotunheimer, or the home of the misshapen giants.
- F. Here is thought to be a fjord, or sound, leading to Russia.
- G. A rocky land often referred to in histories.
- H. What island that is I do not know, unless it be the island that a Venetian found, and the Germans call Friesland."

It will be observed under the B of the Key, the Norse of 1570 did not identify the Vinland of 1000 with the America of later discoveries.



The Skálholt Map, 1696 by Sigurd Stefansson (#431.6)







The historian Fridtjof Nansen states that in this way there arose on the maps at the close the Middle Ages two types of the North: one with Greenland in comparatively correct position to the west of Iceland, though far too near Europe and connected therewith, and another type with *Engronelant* as peninsula to the north of Norway. The latter remained for a long time, the usual one in all editions of Ptolemy, in other cartographical works, and on many globs. After the rediscovery of Greenland we even get sometimes two delineations of this country on the same map, one to the north of Norway and the other in its right place, in the west.

As will be seen below, Greenland seems to have been given a wholly different form on a Catalan compass-chart [*portolan*, nautical chart] from Majorca, of the close of the 15<sup>th</sup> century, where in the Atlantic to the west of Ireland and southwest of Iceland (*Fixlanda*) there is an island called *Illa verde* [the green isle]. It seems that the name must be a translation of Greenland, which is called in the *Historia Norvegiæ* *Viridi. terra*. The representation of Iceland [*Fixlanda*] on this map is incomparably better than on all earlier maps, and gives proof of new Information having come from thence. As the place-names point to an English source, it is possible that the cartographer may have received information from Bristol, which city was engaged in the Iceland trade and fisheries, and his island, *Illa verde*, may be due to an echo of reports about the forgotten Greenland in the west. It is worth remarking that the island is connected with the Irish mythical *Illa de brazil* which lay to the west of Ireland and which appears in this map twice over in its typical round form. If we remember that this happy isle is in reality the *Insulae Fortunatae*, and that in the *Historia Norvegiæ* it is said that Greenland [*Viridis terra*] nearly touches the African islands (i.e., *Insulae Fortunatae*), then we possibly have an explanation of this juxtaposition. But as it is said in the same passage that Greenland forms the western end of Europe, we cannot suppose that the cartographer was acquainted with this work. The probability is, no doubt, that Greenland (*Illa verde*) together with *Brazil*, or the *Insulae Fortunatae*, had become transformed into mythical islands out in the ocean.

**Greenland as an Island:** In 1062 Adam of Bremen regarded Greenland as an island “further out in the ocean opposite the mountains of Suedia”. The earliest depiction of Greenland as an island is on the highly controversial *Vinland* map, purported to have been drawn in 1440 (#243). The extremely accurate portrayal of Greenland, along with concerns about its overall design and ink, has resulted in many scholars calling this map a modern fake. Clearly Greenland is shown in the proper location and overall shape that would not be confirmed for several centuries later. Even if this map was actually created in 1440, as an uncirculated manuscript map, it had no effect on any subsequent European maps.

In the extreme northwest and west of the map are laid down three great islands, named respectively *isolanda Ibernica*, *Gronelada*, and *Vinlandia Insula a Byarno re et leipho socijis*, with a long legend on Bishop Eirik Gñupsson’s *Vinland* voyage above the last two. The map contains the label *Gronelada*. The Icelandic name *Groenland*, in variant forms (including the latinization *Terra viridis*), is used in all early textual sources. That they lie outside the oval framework of the map suggests that they were not in the model, apparently a circular or elliptical *mappamundi*, which the cartographer followed in his representation of Europe, Africa, and Asia.

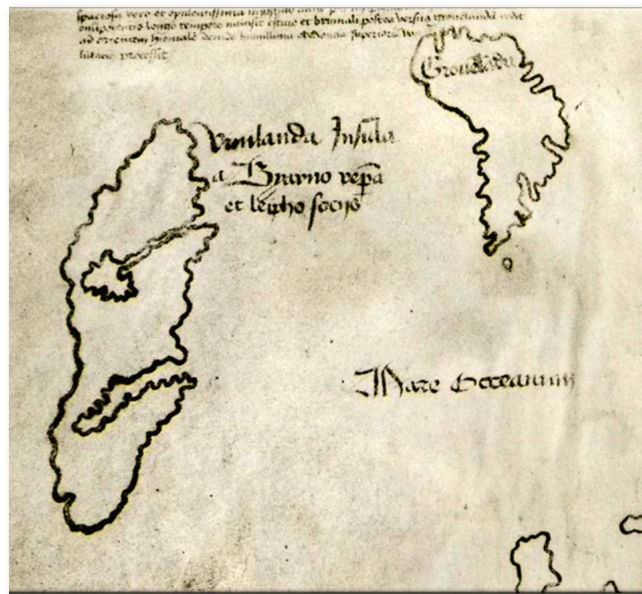
The three islands are drawn in outline, in the same style as the coasts in the rest of the map; and there can be no doubt that the whole map, including this part of it, was drawn at the same time and by a single hand. For this part of the map there are no earlier or contemporary prototypes of kindred character for comparison, and indeed (except in respect of Iceland) no representations with much apparent analogy can be cited before the late 16<sup>th</sup> century. Any attempt to divine the cartographer’s sources of information and their character can only proceed from analysis of his delineation, in the light of impressions formed about his working methods and style; from examination of the knowledge of lands in the northwest Atlantic available in Europe in the early 15<sup>th</sup> century, and of the channels by which it may have been transmitted; and from the scrutiny of later maps or texts for data that might have survived from the period in which the *Vinland* map was made. Here we have at once the most arresting feature and the most exacting problem presented by this singular map.

Greenland, somewhat larger than Iceland, is dog-legged in shape, with its greatest extension from north to south. Its outline, on the east side, is deeply indented and in the form of a bow, the northeast coast trending generally NW-SE to the most easterly point, and the southeast coast trending NNE-SSW to a conspicuous southernmost promontory, in about the latitude of north Denmark; from this point the west coast runs due north, again with many bays, to an angle (opposite the easternmost point) after which it turns NW and is drawn in a smooth unaccidented line to its furthest north, turning east to form a short section lying WE. The approximation of the east coast and of the southern section of the west coast to the outline in modern maps leaps to the eye. The delineation of Greenland as a large island is striking because, as mentioned above, the Danish cartographer Claudius Clavus portrayed Greenland on his maps, from 1427 onwards, as a peninsula of Europe, which became the usual 15<sup>th</sup> century interpretation.





The 1440 Vinland map (#243)

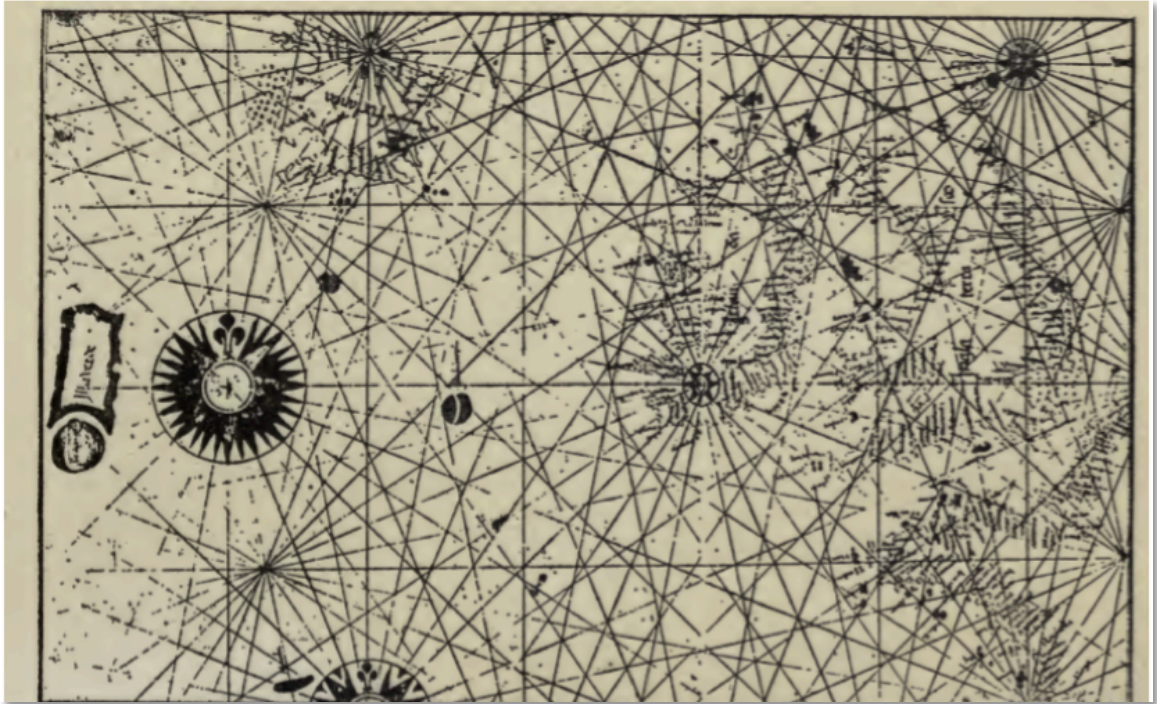


Detail showing Vinland and Greenland

The legend above Greenland reads (in translation): "By God's will, after a long voyage from the island of Greenland to the south toward the most distant remaining parts of the western ocean sea, sailing southward amidst the ice, the companions Bjarni and Leif Eiriksson discovered a new land, extremely fertile and even having vines, the which island



they named Vinland. Eric [Henricus], legate of the Apostolic See and bishop of Greenland and the neighboring regions, arrived in this truly vast and very rich land, in the name of Almighty God, in the last year of our most blessed father Pascal, remained a long time in both summer and winter, and later returned northeastward toward Greenland and then proceeded [i.e. home to Europe?] in most humble obedience to the will of his superiors.]” Two historical events are here described: first, a voyage of discovery by Bjarni [no patronymic] and Leif Eiriksson “southward” from Greenland to Vinland; and second, a visit to Vinland by Bishop Eirik [Gnupsson] in a specified year, viz. A.D. 1117, his stay in the country, and his return.



A section of the Catalan map ca. 1480 displaying Green Island [Illa Verde], two islands labeled ylla de Brazill and the mythical Fixlanda in the north







*A polar bear on an arctic island (Greenland?) as seen on the Behaim globe of 1492 (#258)*





*The King Hamy world map (#307.1), 1502*



*Detail of the King Hamy map showing "Terra Laboratoris" [Greenland] as a narrow east-west oriented island. The half-moon object on the left represents Newfoundland*



Below is an extract from the book by Kirsten A Seaver entitled *The Frozen Echo: Greenland and the exploration of N America ca AD 1000 to 1500*, Published by Stanford University Press (1997). From page 286:

“The anonymous sea chart known as the *King-Hamy* map is an intriguing piece in the puzzle of Joao Fernandes’ voyages, for it is the earliest-known map with reference to the Labrador himself. (Joao Fernandes, charter from Portuguese King in 1499.) Some 30 years ago R A Skelton judged the map to be post 1503 Italian, rather than Portuguese, and while this assessment is open to debate, his discussion on early maps relating to Williamsons Cabot treatise is still a mine of useful information. He noted the radical departure from the known Portuguese tradition in the *King-Hamy* chart depiction of Greenland as an elongated east/west trending island rather than as the northernmost promontory of an Asian mainland. This island is clearly labeled *Terra Laboratoris*. Two other surviving maps, also anonymous, show a similar island named for Labrador.”

The provenance and date of the *King-Hamy* chart are unfortunately still unknown; a recent evaluation in the 1989 *Guide to Medieval and Renaissance Manuscripts in the Huntington Library*, the maps current owner, describes it as a *portolan* chart from about 1502, possibly made in Italy from an early Portuguese prototype. If those assumptions are correct, they increase the chance that the maker of the 1502 *Cantino* map had information about Joao’s early travels, as well as about the Corte-Real expeditions, when he depicted the actual Greenland with its southernmost cape.”



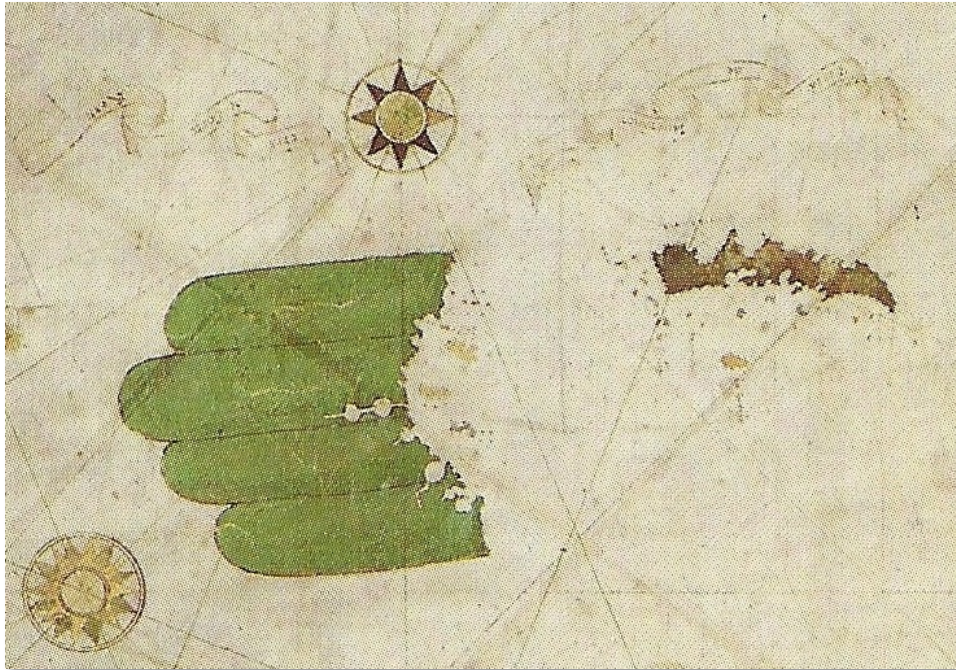
*Barely noticeable is a vague Lavoradore in the northeast that is probably meant to represent Greenland on Maillou's 1527 map (#340).*

This same configuration can be seen on the *Kuntsmann II*, a.k.a. "Four-Finger Map", world map (1502-06, #309) as was displayed on the *King Hamy* map. Greenland (*Terra de Lavorador*) is depicted in the shape of a long and narrow island, stretching from east to west. Newfoundland and Labrador, designated as *Terra de Corte-Reall*, appears as a group of islands that are joined by four finger-like strips, which have given the chart its nickname of "Four-Finger Map."





*The Kuntsmann II world map, 1502-06, #309*



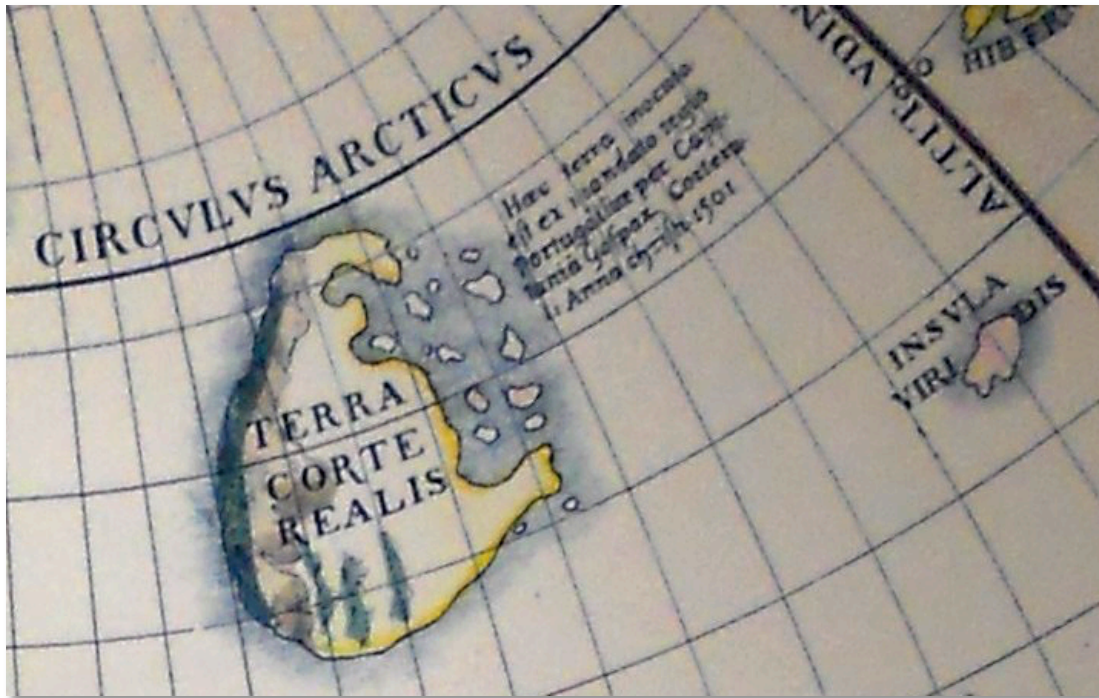
*Detail: shown here are Newfoundland and Labrador, designated as Terra de Corte-Reall, appear as a group of islands and are joined by four finger-like strips, which have given the chart its nickname of "Four-Finger Map," and Terra de Lavorador [Greenland]*





Two "Greenlands" [Groclant and Groenlandi] and Thule, Frisland, Drogeo, S. Brandam on Matthias Quadus' Fasciculus Geographicus, 1508

The *Nova et integra universi orbis descriptio* [Paris Gilt or De Bure Globe], 1527 (#344) also displays Greenland as an island.



Detail from a facsimile of Johan Schöner's 1520 globe showing *Insula Viridis* [Green Island] which is brought down to a latitude between that of southern Ireland and that of northern Spain and east of mid-ocean. (#328)

In Oronce Fine's *Nova, Et Integra Universi Orbis Descriptio*, 1531 (#352.1), like his southern continent, Finaeus' depiction of Greenland shown below is extraordinary, if perhaps less inexplicable. While many contemporary maps depict Greenland as a peninsula of Asia or Europe, Finaeus shows it correctly as an island and in remarkably accurate fashion. Even the island's westerly bulge above Baffin Bay is primitively represented, an amazing feature at this early date, if not simply cartographic luck. North of Greenland, Finaeus shows the Arctic region as four large islands following a concept apparently originating in a 14<sup>th</sup> century treatise already used by Johannes Ruysch in 1507.

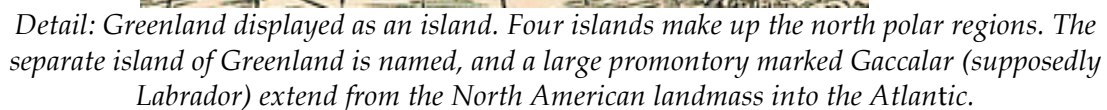
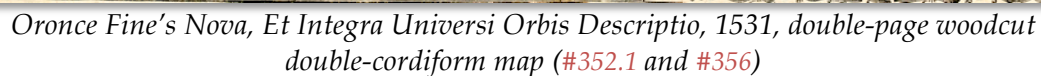




*Pietro Coppo's 1528 world map showing Isola Verde [Green Land] (#341)*

This map of Coppo displays near the true site of Greenland a mass of land elongated from east to west, but clearly all at sea with no greater land near it, and labeled *Isola Verde*. There seems no room for doubt of the meaning or origin of this name. That any land found there should be an island of the sea was the natural assumption of geographers at that time. Maps of the early 16<sup>th</sup> century generally show a scattering of islands south of North America sometimes approaching an archipelago, sometimes more widely distributed, and in either case being substitutes for what we now know as North America and its appendages.









*Portolan chart from 1559 by Mateo Prunes The chart depicts the Mediterranean Sea, the Black Sea, part of the Red Sea, the Atlantic coast of Africa from Cape Spartel to Senegal, and the European coast to northern Scandinavia. Both real and mythical islands appear in the northwest. The real ones include Fixlanda [Iceland] and Isola Verde [probably Greenland]. Among the mythical islands are Isola de Brazil and Isola de Maydi, the latter possibly a name of Arabic origin that first appeared on the 1325 chart by Angelino Dalorto.*

The explorer Gaspar Corte Real evidently sighted the mountains of southern Greenland before he rounded Cape Farewell, but he made no effort to land on either coast. If it is true that Gaspar had left Lisbon at the beginning of September (which was a good time to sail in the Davis Strait, but which did not allow much time before the start of autumn storms in the Atlantic), he had no time to waste on breaking through the ice belt in order to attempt a risky landing on barren-looking, cold, and mountainous Greenland before heading west across the Davis Strait. There, Gaspar discovered a land to the north "that because it was very cool and green and with many trees, as are all the lands in that area, he called it Greenland."

Corte Real's "Greenland" [*Terre Verde*] actually is generally thought to have been in the greater Newfoundland region. The name may merely have been an inspiration akin to Eirik the Red's five centuries earlier, but it may also have resulted from the Iberian cartographical tradition that had caused the Catalan chart of ca. 1480 to show a conceptual *Illa verde* immediately north of an equally stylized *Illa de brazil*. Much clearer are the indications that the extensive knowledge of the North Atlantic that the Portuguese had by 1500, and to which Gaspar and his father had probably contributed, did not include familiarity with Norse Greenland. Gaspar named his subsequent western discovery "Greenland" in apparent ignorance of the name's current employment elsewhere.

Ever since the Dane Claudius Clavus first drew Greenland on a map in 1427 and depicted it as a huge promontory reaching westward from the northern Eurasian landmass, European cartographers had been prepared to accept that a western extension of Asia might be identical with Greenland. The map (#313) which Ruysch made after his voyage with Bristol fishermen to the New World around 1502-4 shows clearly that while he also was unaware that there was an entire American continent to contend with, and imagined Greenland to be an Asian promontory, he saw it as an extreme eastward extension of that continent.

Gaspar Corte Real, who evidently did not associate Cape Farewell with any kind of known Greenland, liked what he saw of his own *Terre Verde* and set out from Lisbon again the following year. With a fresh patent from King Manoel, he and his brother Miguel left with three ships on May 15, 1501, allowing plenty of time for exploration. Again, the expedition followed the route via Greenland's southern cape, where they encountered so much ice that they headed straight west across the lower Davis Strait. All three ships then seem to have coasted south along Labrador before going down the outer coast of Newfoundland Island and, possibly, exploring parts of Nova Scotia.

Sebastian Münster in his 1540 edition of Ptolemy introduced a new confusion. He preserved the European elongated peninsula, but called it *Islandia*, while to what stands for Iceland is given the old classical name of *Thyle*. This confusion is repeated in his map of 1545, where he makes the coast of *Islandia* continuous with *Baccalaos*. This continuity of coastline seemed now to become a common heritage of some of the map-makers, though in the *Ulpus* globe of 1542 (#367) *Groestlandia*, so far as it is shown, stands separate from either continent, but is connected with Europe according to the early theory in the *Isolario* of Bordone in 1547.



Bordone's Scandinavia, 1547.

Reproduced from the facsimile given in Nordenskjöld's *Studien* (Leipzig, 1885).





*Detail: isola verde [Green Land] depicted as a north-south rectangular island, similar in configuration to the legendary Antillia and located just south of Fixlanda [Iceland] and west of the other legendary island of Brasil.*

In another well-known map from 1559 by Mateo Prunes, delineates an elongated *Isola Verde* (using the Portuguese name for island), locating it southwest of Iceland, which bears the name *Fixlanda*, but is easily identifiable by its outline and geographical features. His *Isola Verde* runs nearly north and south, approximating more closely than Coppo's island the true trend of Greenland. It also by its greater bulk seems founded on more adequate information. It is equally at sea and remote from other land, except that of its concave southern end, with a narrow interval, lies a large circular island named *Brasil*, our old mythical acquaintance of medieval maps not often located so far westward.





Gronlandia on the 1564 world map by Abraham Ortelius





*Detail of Groelat [Greenland] on a world map in two hemispheres using the Boone projection, 1566, by the Norman hydrographer Guillaume Le Testu (1509–72). Here Greenland is either considered as an island very close to the European continent, or part of a polar landmass*





*Universi Orbis Seu Terreni Globi In Plano Effigies Cum privilegio 1571, Gerard De Jode, engraved by Van Doetecum, (#356)*



*Detail of De Jode's world map showing Grolandia [Greenland] as an island*





The Forlani map of North America: IL Disegno del discoperto della noua Franza, c. 1565 (#391)

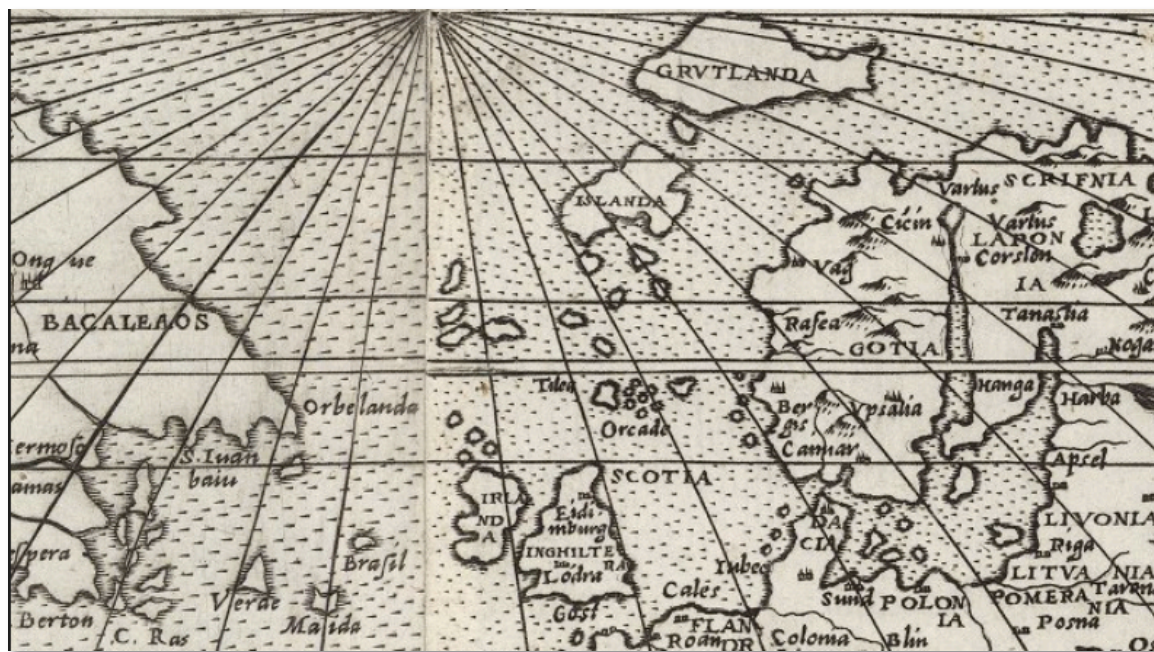




*Detail showing Greenland ostensibly as an island*

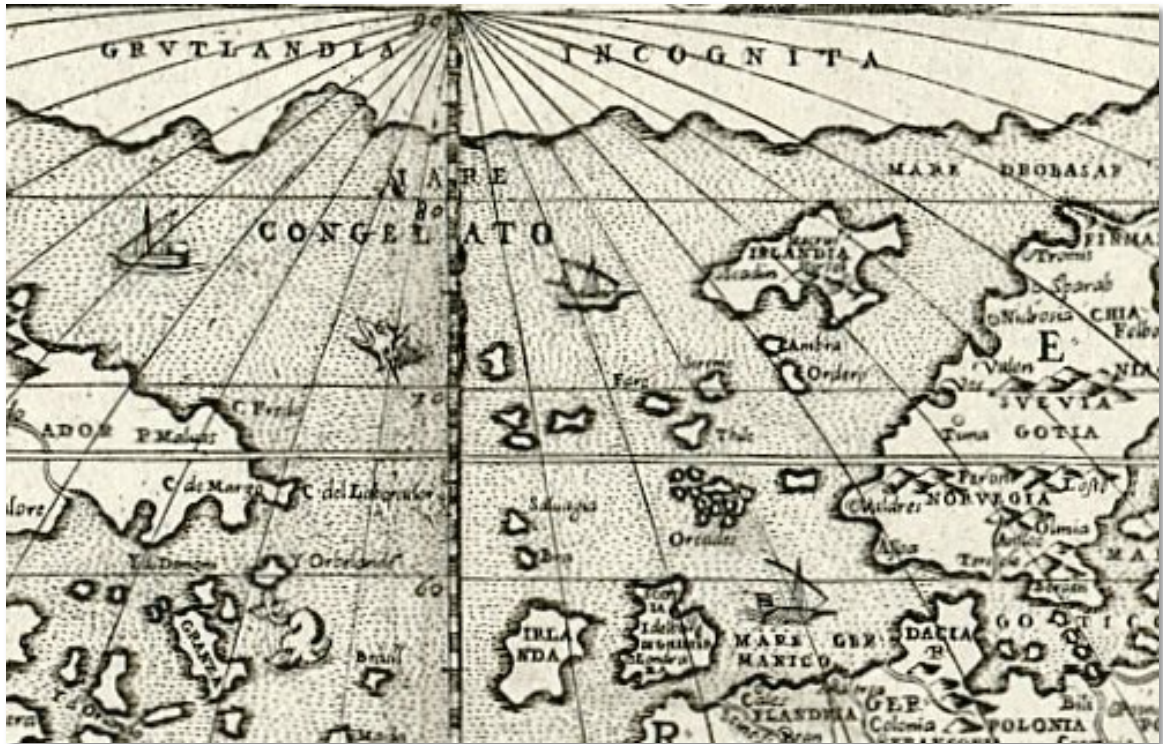


*Universale Descrittione Di Tutta la Terra Conosciuta Fin Oui, Paolo Forlani, 1565  
(Forlani 3) (#398)*



*Detail showing Grutlanda [Greenland] as an island, but locating it north and east of Islanda [Iceland]*

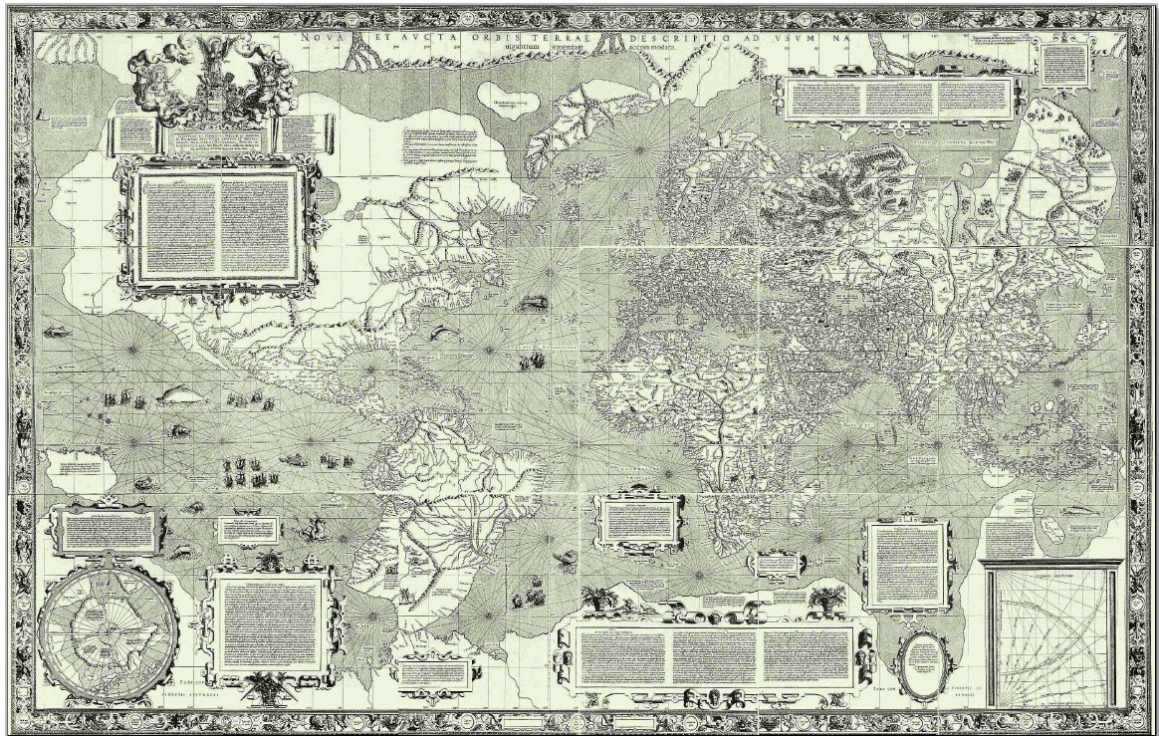




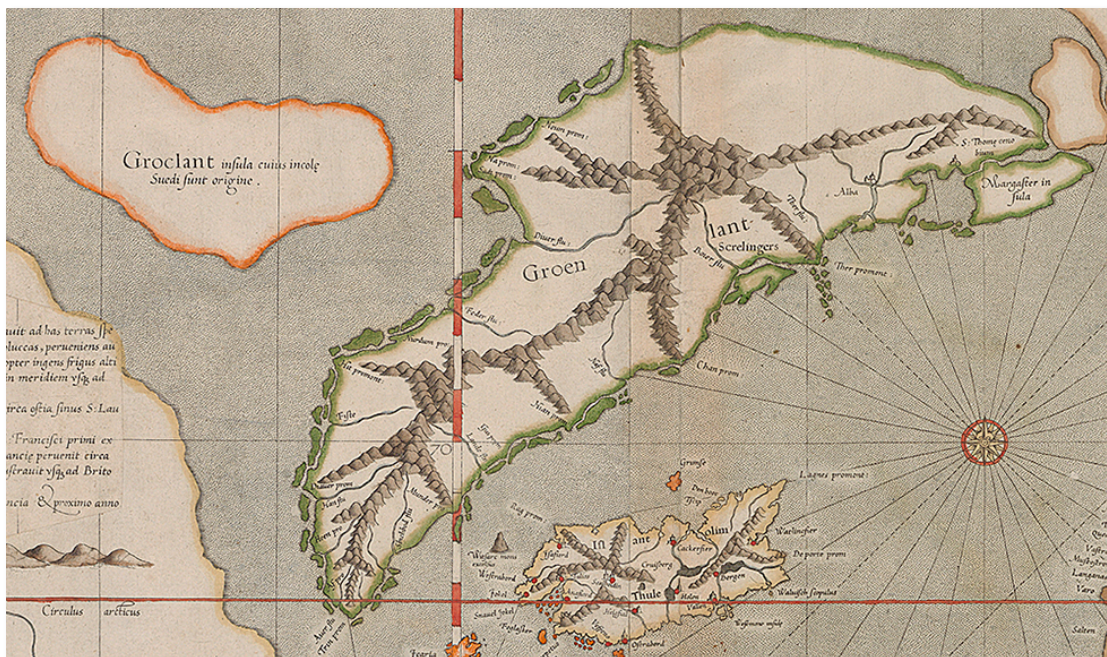
*Grutlandia Incognita [Greenland] shown as a large polar landmass on a world map by Gianfrancesco Camoccio, 1569, with Islandia [Iceland] to the southeast*

Mercator's famous 1569 world map, *Nova et Aucta Orbis ...*, shows Greenland as an island, the northwestern part of which contains a large bay dotted by some islands at its entrance. Compare this area with a modern map of Northern Greenland, showing Independence Fjord and the bay to the fjord with islands at the entrance. Note also the elbow at the bottom of the entrance to Independence Fjord, which appears on both maps.





*Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium emendate . . .*, 1569,  
Gerard Mercator, #406



Detail of Mercator's world map showing Groenlant [Greenland]  
Groclant is the name of a phantom island generally shown off the western side of Greenland, first appearing on maps in the late 16<sup>th</sup> century. The name of the island may be an errant reading of Greenland. One of the first maps to show Groclant was a Mercator map from



1569, where it appeared west of Groenlant, followed by the text in latin: "Groclant insula cujus incolae Suedi sunt origine" [Isle of Groclant the inhabitants are Swedes by origin].

Groenlant and Groclant appear to be facing east and west but they are not as to the old Tabula Solar system. The top shoreline is that of Helluland, to the left of Groclant is Vinland in the bottom and the lower shoreline with the text on it is Markland. On the west coast of Groenlant is the name, "Screlingers". This is the earliest name given by the Icelandic mariners to the inhabitants of the New World, the Indians and the Inuits. Skrälingjar. At the end of Groenlant to the right is the name "St. Thomæ". This is the name of the monastery of St. Thomas at the southern tip of Groenlant, name to be found in the third volume of the book *Grönlands Histoiske Mindesmærker*. This was an old religious clan believing in Saint Thomas Becket. The monastery was owned by the Order of St. Thomas. Crusaders of the dead, collecting bodies in Jerusalem and having them buried with a prayer.

Independence Fjord is slightly above latitude 82°N, and no one from western civilization had been to this area until Admiral Robert Peary got there in 1900 by sledge. Prior to his discovery of Independence Fjord, the area remained uncharted and unknown. In fact Lauge Koch, in his survey of North Greenland, states that from 1616 to 1852, latitude 78°20' N marked the limit of western geographical knowledge of Greenland, in that it marked the limits of navigation.

Throughout the 15<sup>th</sup> and 16<sup>th</sup> centuries a "Green Island", *Isla Verde*, *Isla Verte*, *Ile Verte*, *Ilha Verde*, etc. was placed on maps throughout the Atlantic Ocean from just off the west coast of Ireland to off the east coast of Newfoundland and even in the Caribbean. In the 18<sup>th</sup> century it still held its ground west of France in the eastern Atlantic. By the early part of the 19<sup>th</sup> century it had, after its kind, dwindled to *Green Rock* - *Brazil Island* similarly becoming *Brazil Rock*- as dubious rocks became easier to believe in than dubious islands. Perhaps the well-known actual instances of Rockall and the Virgin Rocks may have prompted credence in other spears and knolls of the earth crust here and there reaching the surface.

So "Green Island", misunderstood and carried southward, dwindles to what may be taken for a capsized vessel's hull, the existence of which is denied by those who best should know. Or, to take it the other way about, the traditions of "Green Island", dwindling, prompted the mariner's fancy to develop a Green Rock; and Green Island is in numerous instances derived mainly, even if remotely, from Greenland, reinforced sometimes by implications of attractiveness.

As seen on some of the examples shown above, amid all this confusion of a European peninsula or an island, one particular error emerged from the jumble of names, shapes and positions: Greenland was split into two islands. An entirely new island, named 'Groclant', began to be drawn alongside 'Groenland' on maps. Some maps show both 'Gronland' and 'Engroneland'; but the most colorful examples occurred in the 16<sup>th</sup> century, when Greenland had become sought after (and fought over) by the Portuguese and the Danish. 'Groenland' would be translated by cartographers into their own language, and eventually the two islands came to co-exist as separate entities. Many maps made in this century, and indeed into the 17<sup>th</sup> century, show the original Greenland alongside 'Green Island' variations such as *Isla Verde*, or *Insula Viridis*.

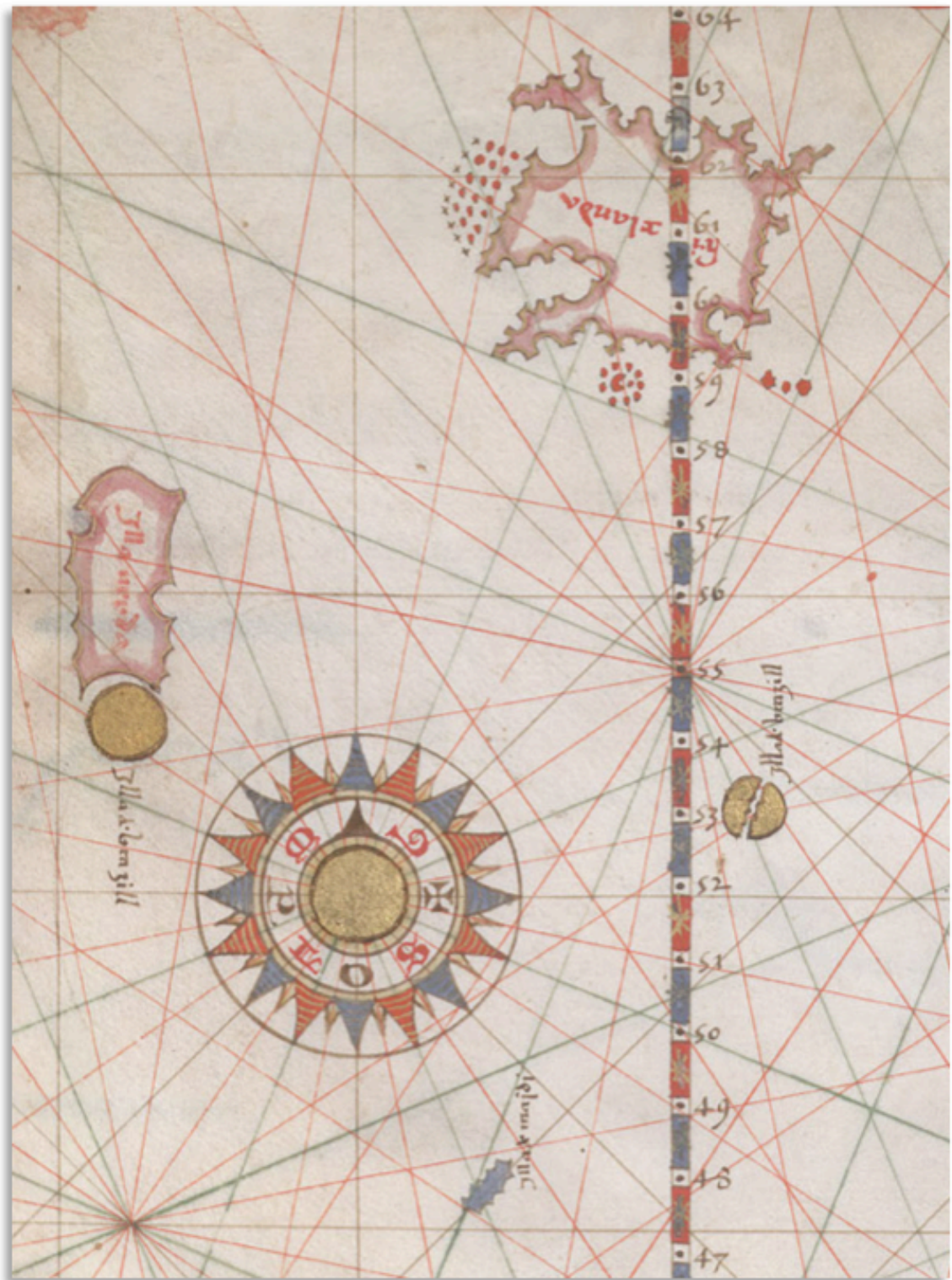


Two "Greenlands" (Groelande and Groelande Suetique) on the 1575 map of Europe by Andre Thevet



Another two "Greenlands" by Thevet, 1575 on his map of the Western Hemisphere



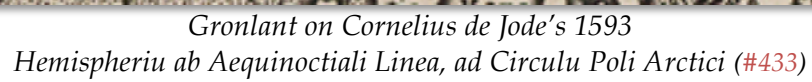


*Detail from Joan Martines' map of the North Atlantic, 1587, showing the Ille Verde, the islands of illa de brazill, Mayda, Ille Verde and Frisland (#416)*



Greenland on the 1587 world map by Urbano Monte (#420)







*Septentrionalium Terrarum descriptio, 1595 (#407), a polar map by Gerard Mercator showing Greenland as an island*

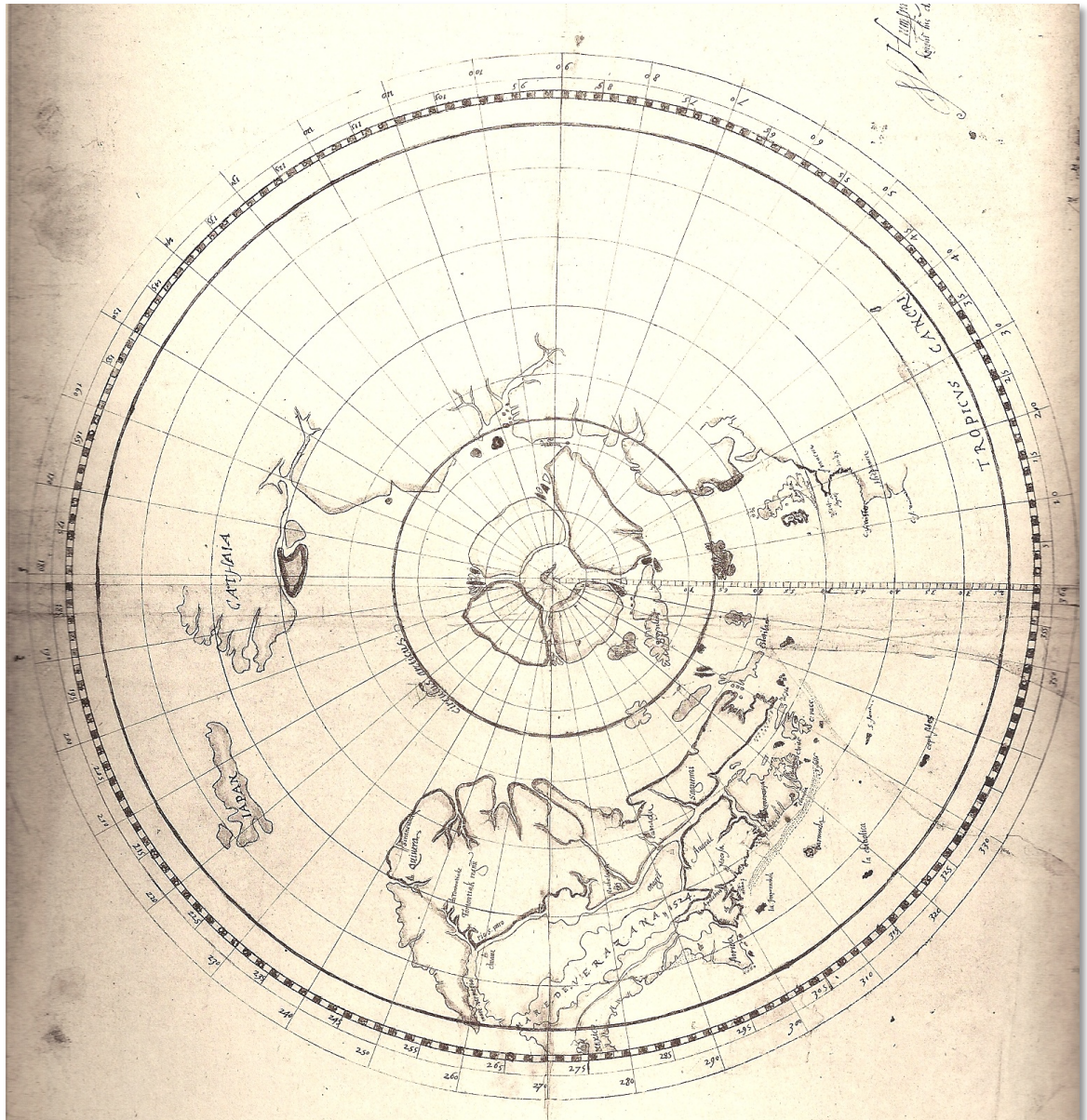




Greenland in Mercator's Atlas of 1595 with a decided slant west-east and two islands, one labeled Groclant and one Groenland.

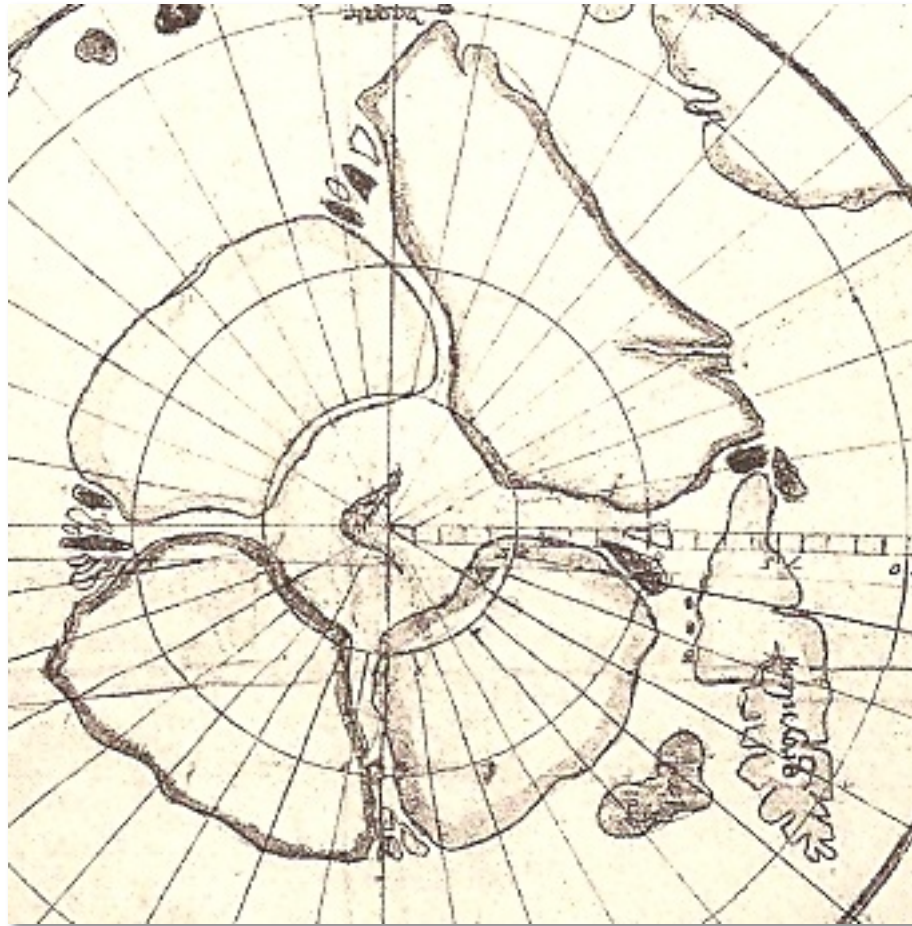
Groclant is the name of a phantom island generally shown off the western side of Greenland, first appearing on maps in the late 16th century. The name of the island may be an errant reading of Greenland. One of the first maps to show Groclant was a Mercator map from 1569, where it appeared west of Groenlant. The island was labeled on the map as being inhabited by Swedes. One of the last maps to feature Groclant was a Quadus map of 1608. 'Groclandt' would seem to have emerged from confusion over the spelling of Groêland - one accidental smudging of the 'ê' and without a tilde it could well appear to be a 'c'. The mistake would have been compounded by awareness of the existent Baffin Island, located to the west of Greenland. A simple error, but one reproduced by authors such as Michael Lok on his map published by Hakluyt in 1582, in which he labels the island "Jac. Scolvus Grotcland", possibly after a lost report of discovery; and by Mathias Quadus on a map of 1608. By 1610, the area was the subject of searching by Sir Martin Frobisher, John Davis and others; but, when all failed to turn up a trace, Groclant was dropped from any further mapping.





John Dee's polar world map 1582 (#417.1)





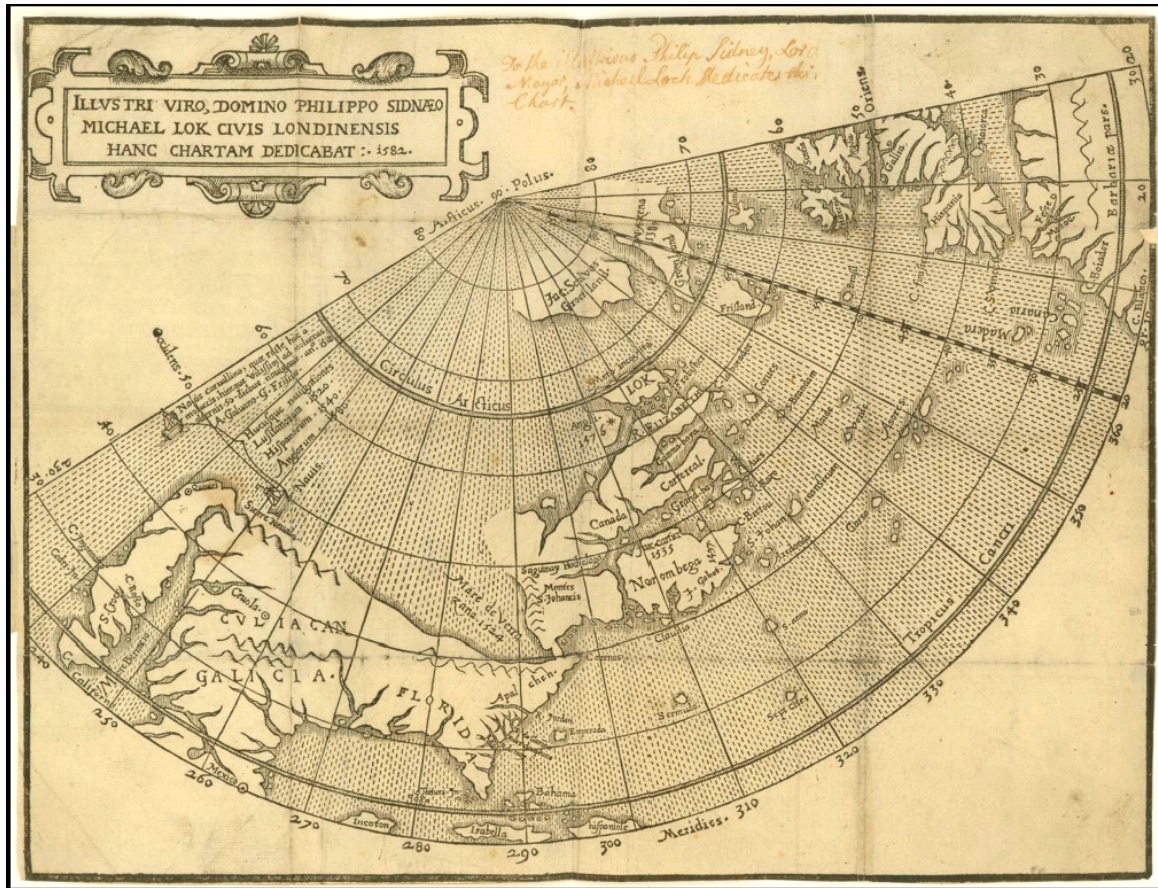
*Detail of John Dee's map showing Greenland as one of the polar islands*



Groenlandia (Greenland) as an ill-defined island (named twice, Groclandia) on the New World map by Francis Gaulle in Peter Martyr, *De Orbe Nouo*... 1587  
Also depicted are Islandia [Iceland] and the mythical islands of Frislandia, Demonum, and S. Brandan

'Groclandt' would seem to have emerged from confusion over the spelling of *Groeland* - one accidental smudging of the 'e' and without a tilde it could well appear to be a 'c'. The mistake would have been compounded by awareness of the existent Baffin Island, located to the west of Greenland. A simple error, but one reproduced by authors such as Michael Lok on his map published by Hakluyt in 1582, in which he labels the island '[ac. Scolvus Groctland]', possibly after a lost report of discovery; and by Mathias Quadus on a map of 1608. By 1610, the area was the subject of searching by Sir Martin Frobisher, John Davis and others; but, when all failed to turn up a trace, *Groclant* was dropped from further mapping.





*Illustri viro, domino Philippo Sidnaeo Michael Lok civis Londinensis hanc chartam dedicabat: 1582. (#419)*



*Detail: Groenland [Greenland] as an island, as well as Groetland and Frisland Lok attributes Greenland to In-A-Kena 1380*





The Skálholt Map, 1590 map by Sigurd Stefansson

Unlike his other map where he links Greenland to Europe, here Stefansson shows Grolandia [Greenland] as an island





*Praeseti Tabula totius Terrae hemisphaerium - Christian Sgrooten c1592*





Groenlandia and a mis-oriented Islandia on the 1592 world map *Praeseti Tabula totius Terrae hemisphaerium* by Christian Sgrooten; below a “second Greenland”







*Americæa Pars Borealis, Florida, Baccalaos, Canada, Corterealis*  
by Cornelis de Jode, 1593 (#432)

The waters of de Jode's northern Atlantic are largely derived from the purported adventures of the Italians Nicolo and Antonio Zeno in 1380. The story and map of their doubtful 14<sup>th</sup> century voyage was published in Venice by a descendant in 1558. As Purchas relates it, the brother Nicolo, "being wealthy, and of a haughtie spirit, desiring to see the fashions of the world, built and furnished a Ship at his owne charges," passed through the Strait of Gibraltar and was promptly carried astray by a tempest. They were adrift until reaching de Jode's *Frislant*, where they were saved from barbarians by a Prince Zichmui who "spake to them in Latine, and placed them in his Navie, wherewith hee wonne divers Ilands".

Following "divers notable exploits" they reached *Groenlant* (Engronelant on the Zeno map), "where hee found a Monasterie of Friers of the Preachers Order, and a Church dedicated to Saint Thomas." This monastery was situated by an active volcano, which afforded a hot spring whose water was used for heating and cooking. The brother Antonio then reached *Estotilant*, assimilated by de Jode as part of easternmost Canada. Next he sailed south to *Drogco* (Zeno's *Drogio*), during which voyage cannibals were encountered. Among the other islands they reached was de Jode's *Icario* (west of *Thule*), where there were "Knights thereof called *Icari*, descended of the ancient pedigree of *Dedalus*, King of Scots." De Jode substitutes the archaic *Thule* for Zeno's *Islanda*.

*Frislant*, which appeared on charts as early as 1500, was possibly based on early knowledge of Iceland, and certainly serves as Iceland on de Jode's map. Both Greenland and Iceland, then, appear in duplicate: *Groclant* and *Groenlant* are both Greenland, and *Thule* (the Shetland Islands of Ptolemy) and *Frislant* are Iceland.



From other northern traditions, de Jode has included the legendary Irish island of S. Brandain.



Detail: the islands of Groclant and Groenlant [Greenland], Thule [Iceland], Frisland and S. Brandain





Groenlant [Greenland] on Gerard de Jode's 1593 polar map (#433)



*Nova Totius Europae Descriptio* by Jodocus Hondius and Petrus Kaerius, 1595





Detail: Groenland [Greenland] depicted as a large island north of Scandinavia



1597 map of portions of Groelandiae [Greenland] by Giovanni Antonio Magini and Corneille Wytfliet along with the mystical islands of Frisland and Estotiland





Two “Greenlands” – Grolant isola and Groenlant [Greenland] along with a very large Islandia [Iceland] and the mythical Fislat [Frislandia], S. Brandan and Drageo de Francesi on Giuseppe Rosaccio’s 1597 world map (#475)



*Scandia, sive regions septentrionales, 1598 by Giovanni Antonio Magni showing several mythical islands: S. Brendain, Frisland, Icaria, Neome, Brasil, Drogeo, Podalida*





92

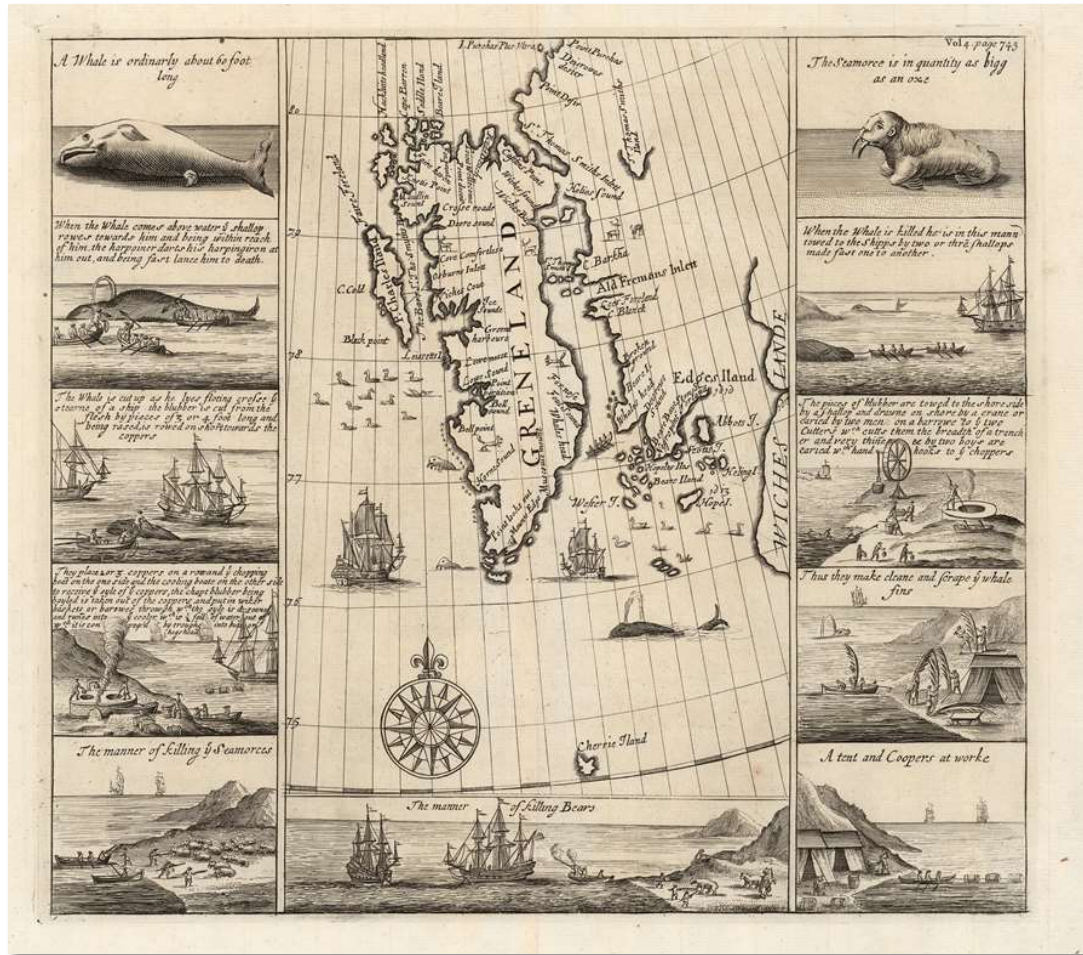


1598 map of the three Arctic voyages (1594–1596) by Willem Barentsz. *Delineatio cartae trium navigantium per Bataves, ad Septentrionalem plagam, Norvegiae, Moscoviae et novae Semblae* Autore Wilhelmo Bernardo. Willem Barentsz mapped Spitbergen for the first time. It's labeled here as *Het Nieuwe Land*, which is Dutch for "the new land."





Detail showing Groenlandia [Greenland] as an island, along with Islandia [Iceland] and Frisland on a 1602 map of Europe by Jodocus Hondius.



Map of Spitsbergen (here called "Greneland"), 1744 from Purchas His Pilgrimes (1625). Purchas attributes the map to Thomas Edge, a captain who made numerous whaling voyages to Spitsbergen. The mapping of the western portions of the archipelago - formerly known as Spitzbergen - is very accurate, despite being erroneously labeled 'Greneland.' In its earliest version, printed by Samuel Purchas, For more than a century, this was the most detailed map of the Arctic archipelago. The map is untitled, and the most prominent place name is 'Greneland, which was the English term for the islands the Dutch called Spitzbergen, here referring to Svalbard. To the west is Prince Charles' Island, now known as Foreland, The coastline of the aptly-named Nordaustlandet is confused; Edge, if indeed he composed the map, could not say whether it was another island or part of Svalbard, and he passes this bafflement on to the reader. Only the west coasts of Barents' Island and Edge Island are shown, and the passage dividing them - Freemansundet - is here referred to as Aid Fremans Inlett, suggesting that Edge suspected the two islands to be connected, At the eastern extreme lies Wiches lande, which is either a representation of an insufficiently-distant Nova Zembla, or entirely imaginary, there being no corresponding actual land mass, In his account in Purchas, Edge states that an English ship 'discoverd to the eastwards of Greenland (Svalbard) as farre to the North Wards as seventie nine degreez, and an iland which he named Wiches Iland, and divers other ilands as by the map appeareth. By the description, this might refer to the Kong Karls Land Islands, which the large coastline of the map's 'Wiches Lande' does not at all resemble. The eleven scenes bordering the map, also informed by Edges' voyages to the islands, depict the whaling, walrus, and bear hunting which drew



(ref. [www.geographicus.com/P/AntiqueMap/spitzbergen-churchill-1744](http://www.geographicus.com/P/AntiqueMap/spitzbergen-churchill-1744))







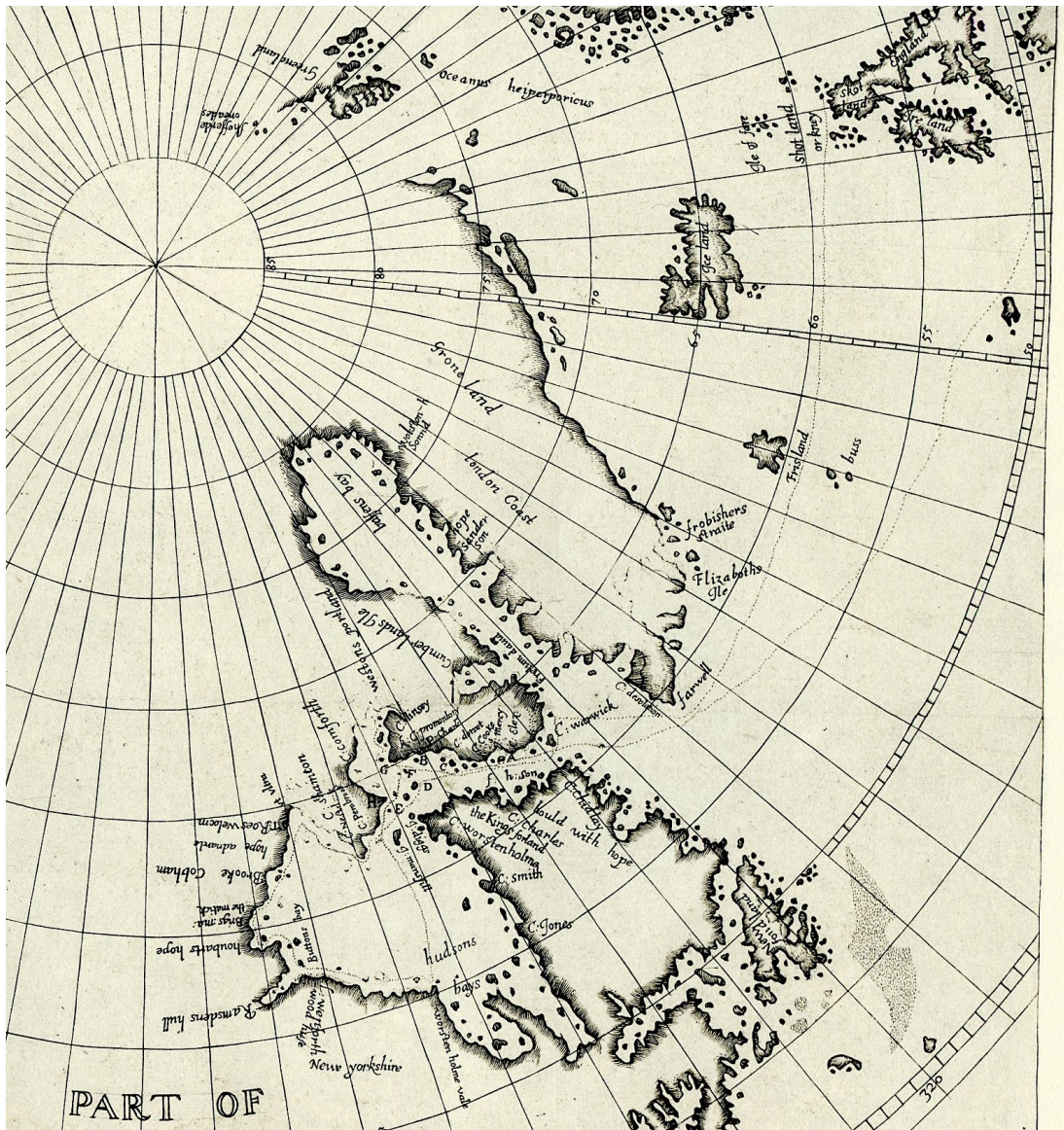
*America with those known parts in that unknowne worlde both people and manner of buildings described and enlarged by I.S. Ano 1626, John Speed*





Detail: an ill-defined Greenland, Frisland. Icaria inset





*Groneland [Greenland] on the circumpolar projection by Luke Fox in his North-West Fox*  
1635





This map of the North Pole was published by Moses Pitt in the 1680 English Atlas, Volume 1, number 3. This North Pole map shows northern Canada in more detail than the first two – but a lot is still missing. Everything west of Baffin's Bay and Hudson's Bay was still unknown to the European explorers. Notice the depictions of Inuit culture and whaling along the top of the map, as well as the inset of Nova Zembla. Explorers took interest in the Russian island while searching for the Northeast Passage. Here Greenland is depicted as two islands plus a large landmass connected to the North American continent.





*Nieuwe Wassende Graaden Paskaart Vertoonende alle de bekende Zeekusten en Landen op den geheelen Aard Boodem of Werelt door Gerard van Keulen, 1728*



*Detail showing Nieu Groenlant [Greenland] as an extention of North America*



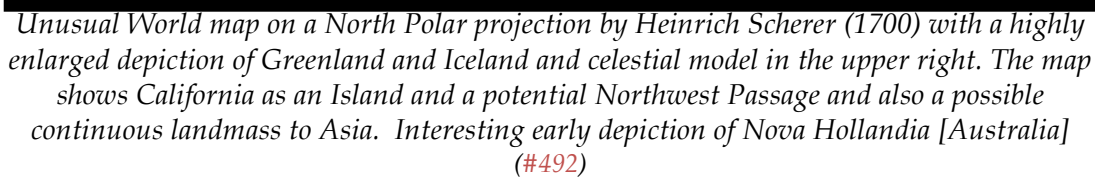


*Regionum Circum Polarium Lapponiae Islandiae Et Groenlandiae Novae Et Veteris Nova Descriptio Geographica* by Heinrich Scherer, 1702, #492

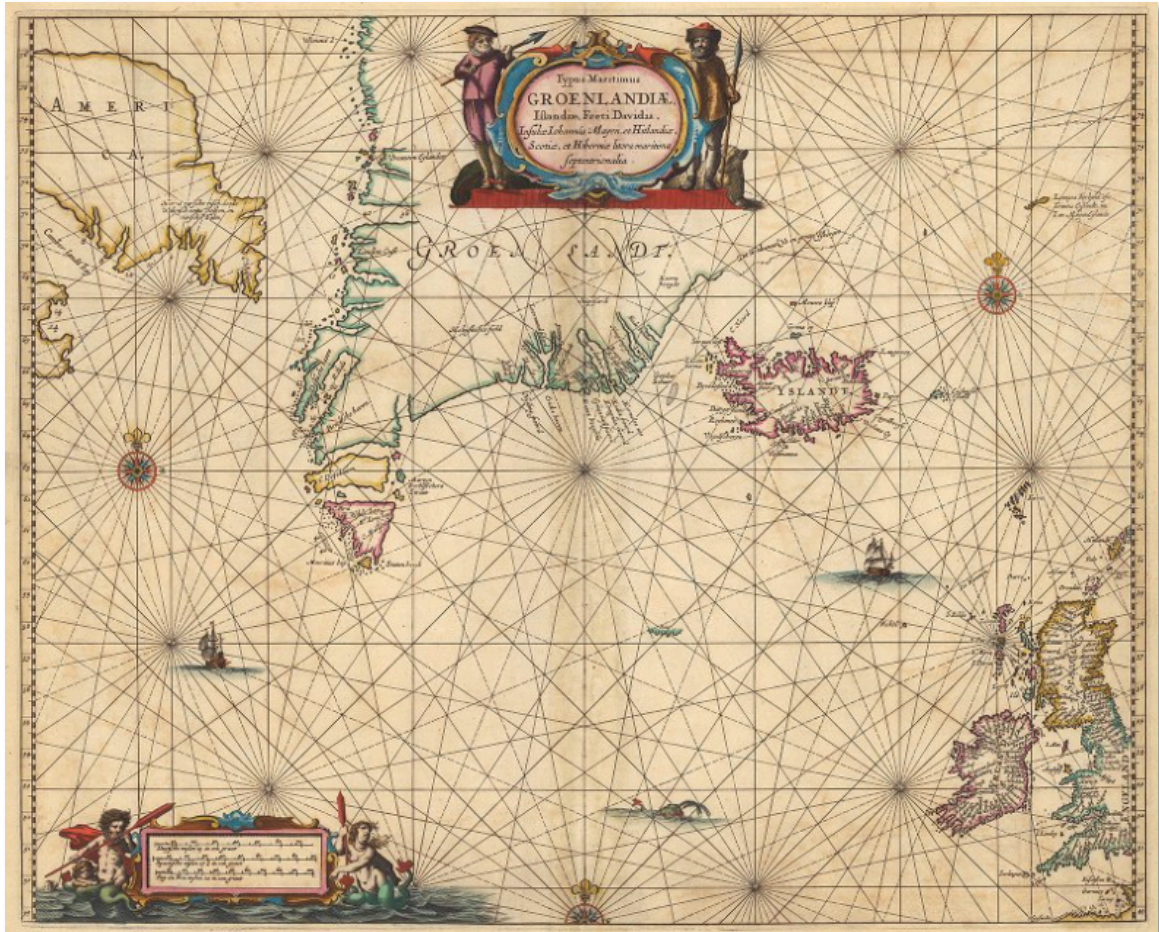
Heinrich Scherer, a Jesuit cartographer from Germany, held on to the hope of a Northwest Passage via Hudson's Bay, though there had not been any major expeditions to the Canadian Arctic since the 1630s to provide more detail. His decorative map included the mythical island, *Frisland*. This north polar projection map is a busy, decorative map, full of scenes of hunting, whaling, and a Lapland market. Mythical *Frisland* and the inaccurately placed Frobisher "strait" contrast with a much better defined eastern North America. However, there is not much development here of the Canadian Arctic, for there had been no major expeditions in the area since the 1630s. In fact, cartographers would have to wait till the 1770s for Samuel Hearne's overland journey and James Cook's Pacific voyages before realizing the true extent of territory they still had to fill in. In Asia, though, all Siberian rivers had been discovered and navigated, and the most eastern part of the Asian continent had already been rounded by the Russian Cossack Semen Dezhnev in 1648. Here Greenland is depicted as a very large island, in three parts.











*Typus Maritimus Groenlandiae Islandiae, Freti Davidis, 1690 by Nicolaes Visscher*





Map of southern Greenland by Vincenzo Coronelli, *Frislanda and Parte della Groenelanda*, 1692

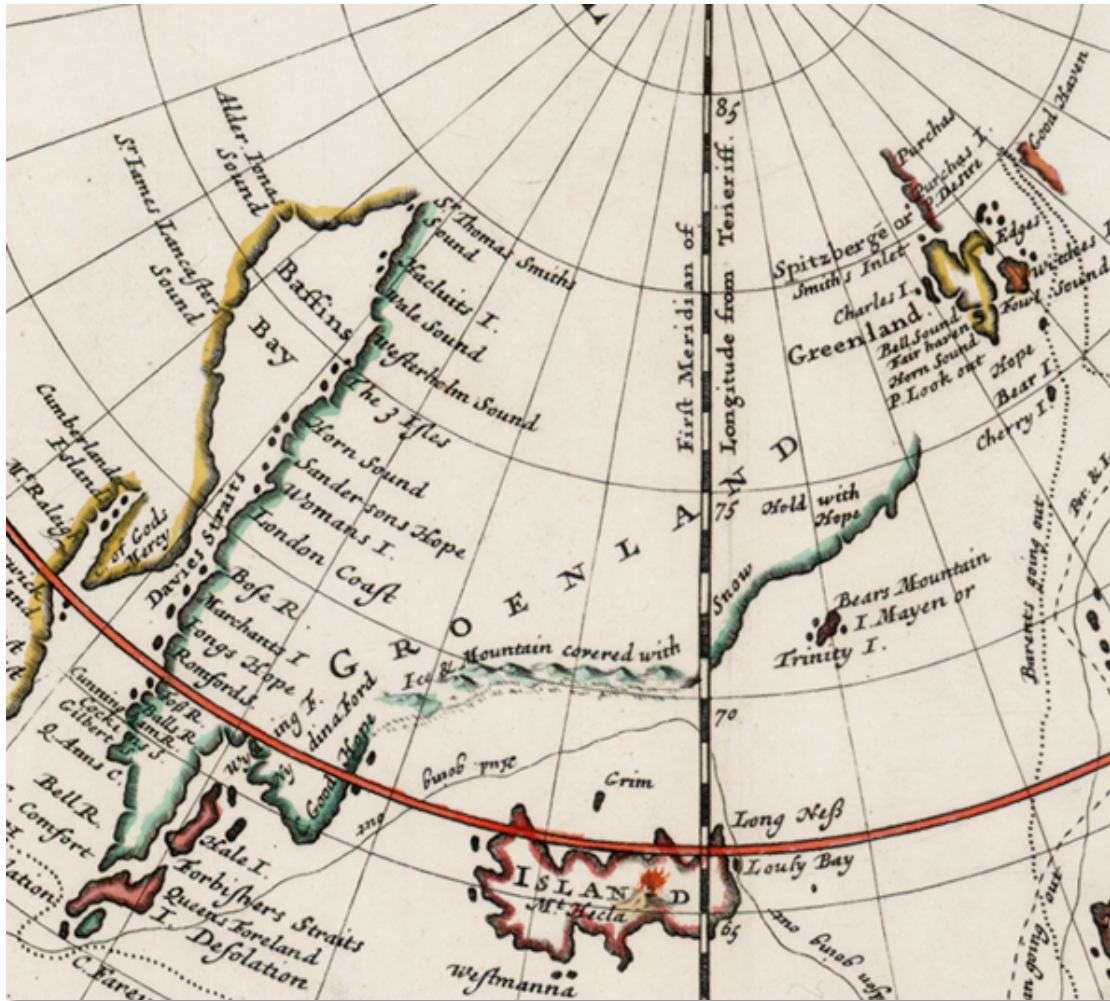
It is not necessary to follow the course of the Greenland cartography farther with any minuteness. As the 16<sup>th</sup> century ended we have leading maps by Hakluyt in 1587 and 1599 (see Vol. III. 42), and De Bry in 1596 (Vol. IV. 99), and Wytfliet in 1597, all of which give Davis's Straits with more or less precision. Barentz's map of 1598 became the exemplar of the circumpolar chart in Pontanus' *Rerum et Urbis Amstelodamensium Historia* of 1611. The chart of Luke Fox, in 1635 (see page 94 herein), marked progress better than that of La Peyrère (1647), though his map was better known. Even as late as 1727, Hermann Moll could not identify his "Greenland" with *Groenland*. In 1741, we have the map of Hans Egede in his *Grönland*, repeated in late editions, and the old delineation of the east coast after Torfæus was still retained in the 1788 map of Paul Egede.



*This Draught of the North Pole is to Shew all the Countries near and adjacent to it, as also the most remarkable Tracks of the Bold Discoverers of them, an Particularly the Attempts of our own Countrymen to find out the N. East and N. West Passages, 1705, Herman Moll*

Scarce map of the North Polar regions, depicting the tracks of 16<sup>th</sup> and 17<sup>th</sup> century explorers. The map shows the routes of a number of early explorers, including Barentsz, Hudson, James and others, ill search of the Northeast and Northwest Passages.





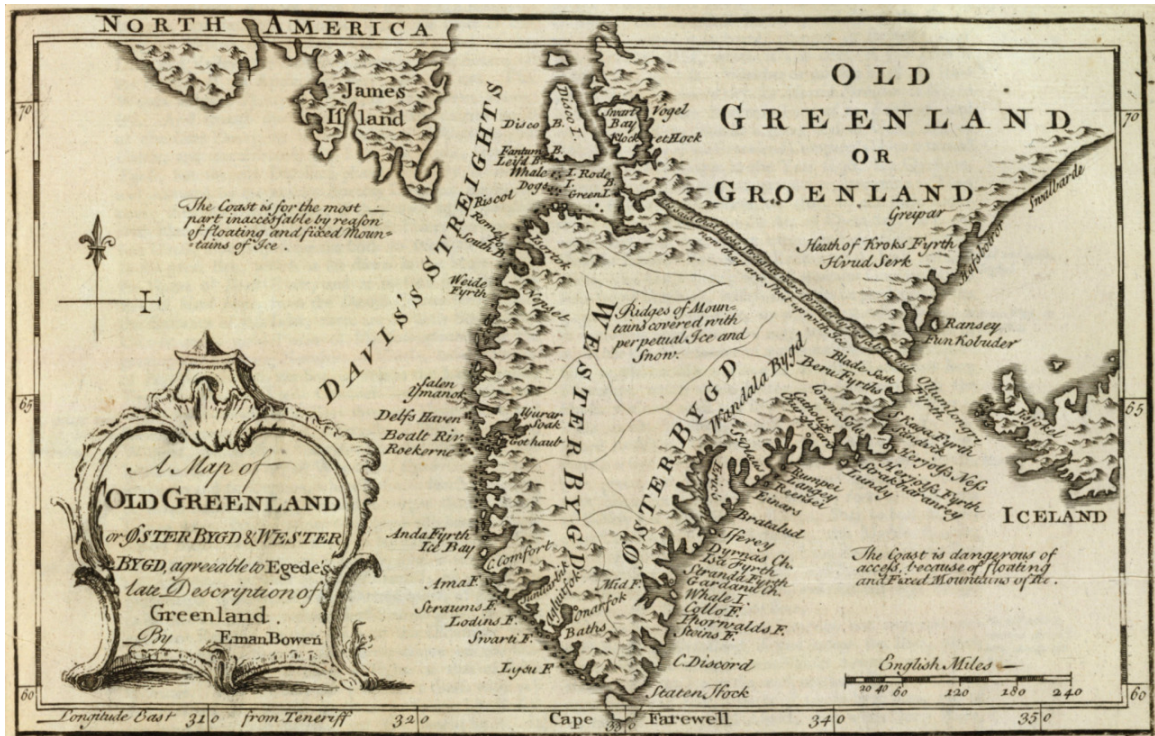
Detail: Groenland



Map of Greenland, Hans Poulsen Egede, 1737

Hans Poulsen Egede, the Norwegian-born Lutheran clergyman and missionary known as the "Apostle of Greenland." Egede made two journeys, in 1723 and in 1724, to explore the west coast of Greenland with the goals of mapping the coastline and obtaining information about the ancient Norse settlements on the island. Egede lived and worked in Greenland from 1721 to 1736. Upon his return to Denmark, he had this map made and published a book, *Omstrendelig og udforlig relation, angaaende den grønlandske missions begyndelse og fortsættelse, samt hvad ellers mere der ved landets recognoscering* [Relation, about the beginning and continuation of the Greenland missions; Copenhagen, 1738], in which he described his many initial difficulties. The map is extensively annotated in Danish and includes a scene at the lower right apparently depicting Inuits and Europeans in a fight with bows and arrows. The cartouche reads: "A new outline of the western side of Old Greenland from 60 to 67 degrees surveyed in 1723 and 1724 and along the land and in the fiords diligently reconnoitered by Hans Egede, first Royal Danish Missionary in Greenland. Copenhagen, 4 January, 1737."





A map of old Greenland or Oster Bygd & Wester Bygd, agreeable to Egede's late description of Greenland, by Emanuel Bowen, 1747

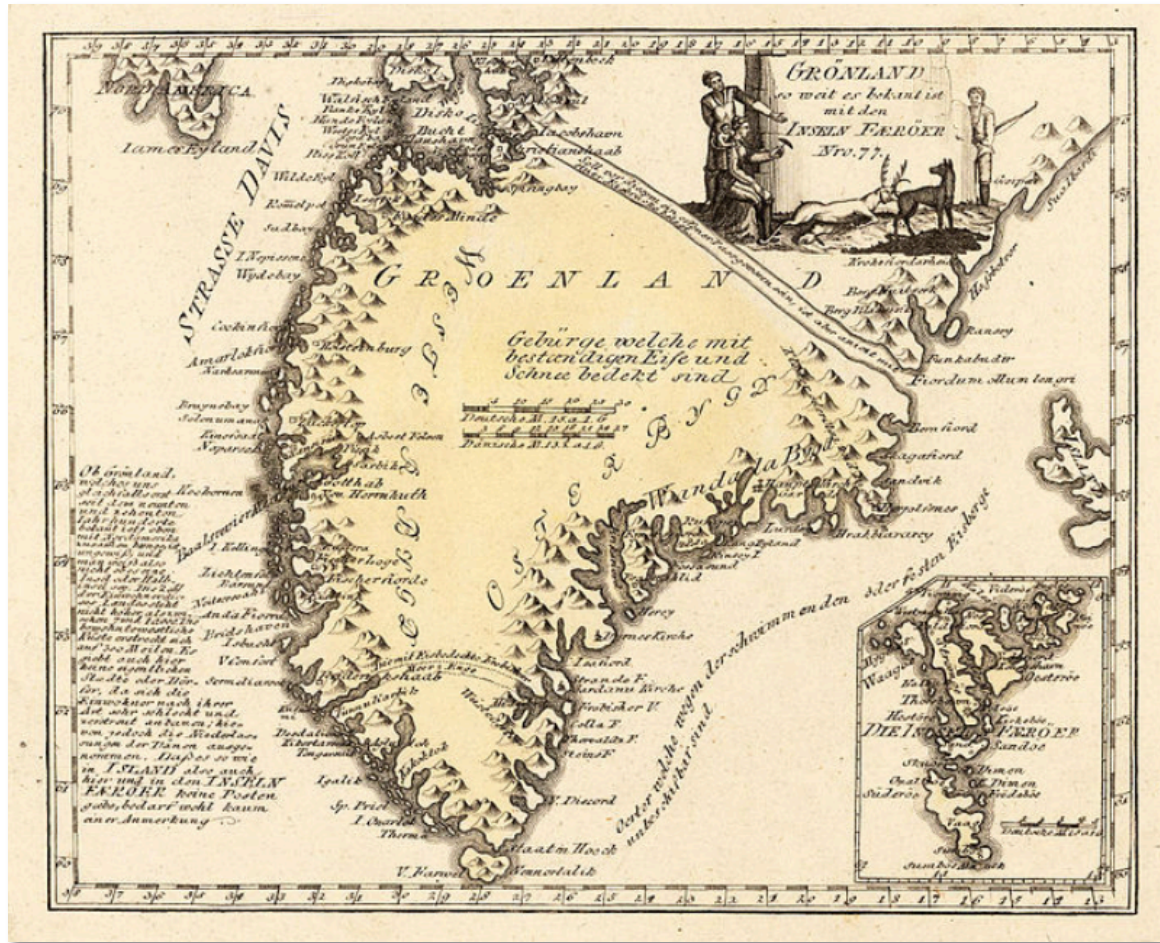






1770 map of Greenland [Carte de Groenland] by J. Laurent





Map of Greenland in 1791 by Franz Joseph von Reilly

From 1852 to the early 1900s, geographical knowledge of North Greenland was gradually broadened, principally by sledge journeys. Indeed, the leading geographer of the 19<sup>th</sup> century, August Petermann, believed that Greenland extended across to Siberia, based upon the fact that Siberian driftwood was found in Europe, but not generally on the west coast of Greenland itself.

Although an 1865 map by Lauge Koch adheres to Petermann's theory, the theory was gradually abandoned as more information was obtained throughout the 19<sup>th</sup> century, particularly with the drift of Fridtjof Nansen's *Fram* vessel across the north ocean in 1894-1895. The *Fram* drifted from the Pacific Ocean off Siberia at the New Siberian Islands to Spitsbergen in the North Sea. The final blow to Petermann's theory occurred when Peary traveled around the north of Greenland.

So, how did Mercator obtain the information for his map, created more than 300 years earlier? He probably didn't learn that it was an island until after 1538, for his world map of that year shows Greenland as a peninsula coming out of the north. Clearly, Mercator did not make his 1538 or 1569 maps using contemporary information from sailing ships, because none could sail there. (Even today, with the warming of the climate in the late 20<sup>th</sup> century, the ice would still prevent sailing to northern Greenland.) And yet, not only does Mercator's 1569 map accurately depict northern Greenland, but it shows free-flowing rivers—something that did not exist



## 5.19

**NORDPOLARKARTE**  
zur Übersicht einiger geschichtlichen Momente & der jetzigen Hauptplätze der  
**GROSSFISCHEREIEN (WALFISCHFANG & ROBBENSCHLAG)**  
Von A. Petermann.

Ergebnisheft 37 Tafel I.

Die Weltkarte zeigt die Nordpolarkarte in der Mitte. Die Karte ist in vier Quadranten unterteilt: NORD-AMERIKA, EUROPA, ASIEN und AUSTRALIEN. Die Nordpolarkarte ist eine polare Projektion, die die Nordpolregion zeigt. Sie ist mit einer Gitternetzlinie versehen, die die Breiten- und Längengrade anzeigt. Die Karte ist in verschiedene Zonen unterteilt, die durch Linien markiert sind. Die Zonen sind: NORD-AMERIKA, EUROPA, ASIEN und AUSTRALIEN. Die Karte ist mit vielen Namen beschriftet, die die verschiedenen Orte und Regionen angeben. Die Karte ist in vier Quadranten unterteilt: NORD-AMERIKA, EUROPA, ASIEN und AUSTRALIEN. Die Karte ist mit einer Gitternetzlinie versehen, die die Breiten- und Längengrade anzeigt. Die Karte ist in verschiedene Zonen unterteilt, die durch Linien markiert sind. Die Zonen sind: NORD-AMERIKA, EUROPA, ASIEN und AUSTRALIEN. Die Karte ist mit vielen Namen beschriftet, die die verschiedenen Orte und Regionen angeben.

Legende:

- Grenzlinie 1773
- Willkürliche 1775
- Grenze der alten russischen Provinzen
- Grenze der jetzigen russischen Provinzen
- Schiffsfahr- und Handelswege

Maßstab 1:4000000

GOTHA: JUSTUS PERTHES

*Petermann's 1869 map showing Greenland extending across the North Pole to Siberia*



In short, Mercator's 1569 map of Greenland depicts the island far more accurately than 19<sup>th</sup> century maps. With no scientific knowledge to prove otherwise, mapmakers of the 19<sup>th</sup> century simply ignored Mercator. They must have assumed he couldn't have made an accurate map of Greenland, and therefore, whatever he had drawn was simply a figment of his imagination. But details on the 1569 map are far too accurate to have been a mere product of imagination.

Sixteenth and 17<sup>th</sup> century sailors knew that northern Greenland was inaccessible. This is shown by the Danish sailing instructions to Greenland given to Henry Hudson in connection with his voyage to Hudson Bay:

Then Gunnbiorn's Rocks lie half way between Iceland and Greenland. This course was anciently taken, but now it is said that there is ice on the rocks that has come out of the Northern Ocean, so that it is no longer possible to go that way without peril of life ...

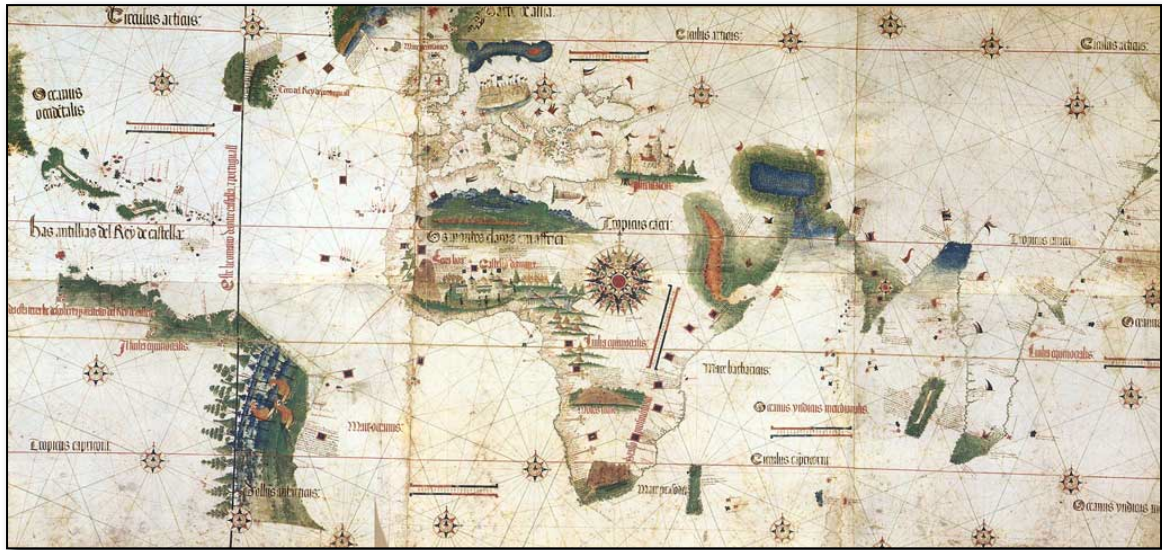
† Sailing Directions of Henry Hudson, Rev. B. F. De Costa, 1869, as translated for Hudson from Ivar Bardsen's Sea Card of 1490.

It should also be noted that, similar to the gore mapmaker, Mercator was not alone. Another world map of 1565 by Paolo Forlani also shows Greenland as an island. Greenland appears at the top middle of this map under the name *Grvtlanda*. While it is nowhere near as detailed as Mercator's map, it proves that other mapmakers of that time knew that Greenland was an island.

It would seem that the source for these maps was neither the 16<sup>th</sup> century nor any of the centuries recently before, but at a far earlier time when the climate was sufficiently warm to have permitted sea travel in the northern latitudes.

At the beginning of the 16<sup>th</sup> century the northern countries were a very unknown region to most people in southern Europe. The information about the North was based on the descriptions written in the antiquity and medieval times, and depicted on few maps. The region was often described as an island in a nameless northern sea, or as an east-to-west "peninsula" resembling the shape of an oak leaf. Before Olaus Magnus' map, the most important earliest maps of the Nordic countries – that have survived to our days – were in addition to the map published in 1532 by the Bavarian Jacob Ziegler – those that appeared in the numerous printed "Ptolemy Editions". They were based on the map compiled in 1427 by the first Nordic cartographer, the Dane Claudius Clavus, and improved by the German Nicolaus Germanus. The cartographic representation of the North was, however, quite faulty and far from reality.

### Greenland as an Asian Peninsula:



*Chart for the navigation of the islands lately discovered in the parts of India, known as the "Cantino World Map" 1502 (#306)*

Taking full advantage of his Lisbon listening post, Alberto Cantino commissioned a world map for his duke. It was a state-of-the-art depiction of some Spanish but mostly Portuguese discoveries that included the voyages of Cabral and Vasco da Gama as well as the Corte Real explorations of 1500 and 1501. The cartographer obviously did not know or care about the Norse Greenland colony belonging to Denmark-Norway, which is not surprising. Just a few people who quietly profited from intermittent trade there knew about the "real" Greenland's tiny European population, and those merchants were most likely from Bristol, as we have seen. The historian James Williamson tartly observes that: "(t)he cartographer ... ignored Cabot and the English as if they had never been". The map is always associated with Cantina's name, while the cartographer's identity (probably an Italian working in Portugal) has remained a secret for reasons summarized by Kenneth Nebenzahl:

In the political atmosphere of this period, the need for anonymity was imperative. Success in the bitter rivalry between Spain and Portugal required that the new geographical data generated by discoveries in the East and West Indies be kept secret. Information from returning mariners was assembled by cartographers to form official charts for kings and their advisors. To copy or divulge the contents of these royal maps was a capital crime.

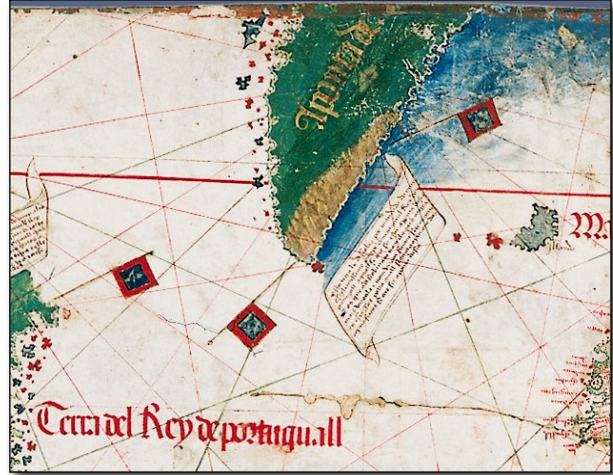
The Cantino planisphere, therefore, was drawn at such risk to the cartographer and sent off in the greatest secrecy, was received by Ercole d'Este in November of 1502. As in other planispheres of the early 16<sup>th</sup> century, and in contrast to Juan de la Cosa's map (#305), the unknown Portuguese cartographer divides North America into three disconnected landmasses, widely separated from one another:

- *Punte de Asia* [Greenland?]
- *Terra del Rey de portugall* [Newfoundland?]



- the land to the northwest of *yssabella* [Cuba], which has been variously interpreted as representing Florida, Yucatan, and unintentional repetition of Cuba, or a peninsula in East Asia.

In the north Iceland is placed very nearly in its proper location and the Corte-Real landfalls in Greenland and Labrador (1500-01) are marked by Portuguese flags and by the legend contained in a *banderol* scroll (against Greenland): "This land was discovered by license of the most excellent Prince D. Manuel King of Portugal, and they who discovered it went not ashore, but viewed it and saw nothing but very thick mountains, whence according to the opinion of cosmographers it is believed to be the peninsula of Asia." This "peninsula of Asia" would refer to Pliny's *Tabin Peninsula*, Asia's supposedly ultimate northeast peninsula. According to James Enterline, it is plausible that this map of Greenland came from another unknown Norse or Eskimo prototype instead of from contemporary Portuguese explorers. Without this banner scroll, an argument could be made that, based upon earlier maps, this representation of Greenland could be as a peninsula from northern Europe.



Though upon the *Cantino* map is found no statement referring to Corte-Real in the northern area it bears, as indication of sovereignty, the Portuguese flag upon the southern tips of Greenland and Newfoundland. As mentioned earlier, Greenland is supposed to have been "re-discovered" by João Fernandes Labrador and Pedro de Barcelos between 1495 and 1498, and also visited by Giovanni Caboto (John Cabot), in the English expedition of 1498. But the depiction of the island [?] on the map suggests it was based on the Portuguese mission of Labrador and Barcelos. Because nothing of the far north is displayed, it is unclear if the *Cantino* map viewed Greenland as an island or as an extension of Europe as had been the custom earlier.

A very similar rendering of Greenland can also be found on the 1502-05 *Caveri* [Canerio] world map (see below #307). Again, like the *Cantino* map, it is unclear whether the depiction of Greenland was meant to be as a peninsular extension from Europe or Asia, or an island.

It is well to remind ourselves here that Cape Farewell probably was a regular course-marker for both English and Portuguese mariners well before 1500, and that cartographers acknowledged this on maps that otherwise reflected their own preoccupations.



*Detail from the Caveri world map of 1502 (#307) showing a portion of Greenland, Newfoundland and Western Europe*

Johannes Ruysch's treatment of Greenland in his 1508 world map (#313) exemplifies the composite nature of his representation. Ruysch correctly draws *GRVENLANT* [Greenland], as separate from Europe, not connected with Europe by a vast polar continent as some earlier maps indicate. Instead of connected with Europe, he links Greenland with Asia through Newfoundland (*Terra Nova*). In addition, he shows the northern polar regions as a basin with a number of islands, thus prompting the long-held hope for a Northwest passage from Europe to Asia. Ruysch seems to have had no doubt that *Gruenlant* was a part of Asia and not of Europe as usually represented on maps of this period. Off the coast of *Gruenlant* is the location of an island that was totally consumed by fire in the year of our Lord, 1456. According to the historian A. E. Nordenskiöld, "the sagas of Iceland mention a small island between Iceland and Greenland from which the coast mountains of both were visible, although no such island at present exists". Directly south of *Gruenlant* the following inscription gives warning of the dangers encountered by fishermen in that region: *It is said that those who came formerly in ships among these islands for fish and other food were so deceived by the demons that they could not go on land without danger.* An inscription describing nearby islands warns that sailors who had gone to them had been tricked by demons.

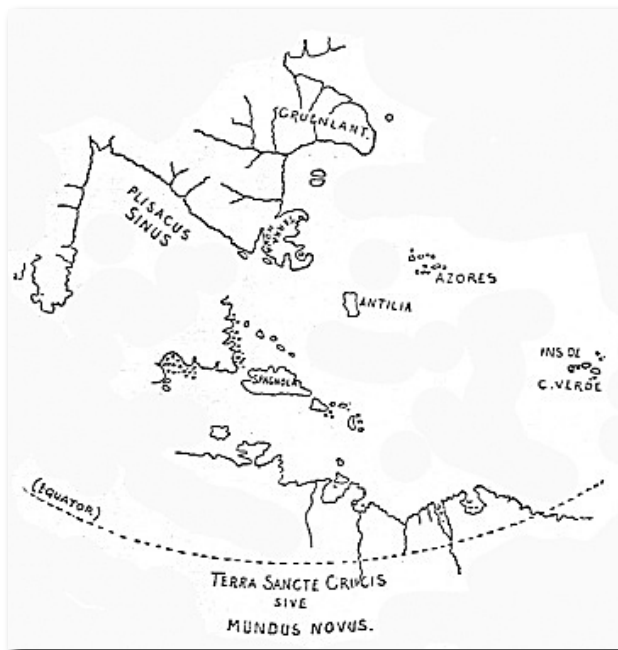


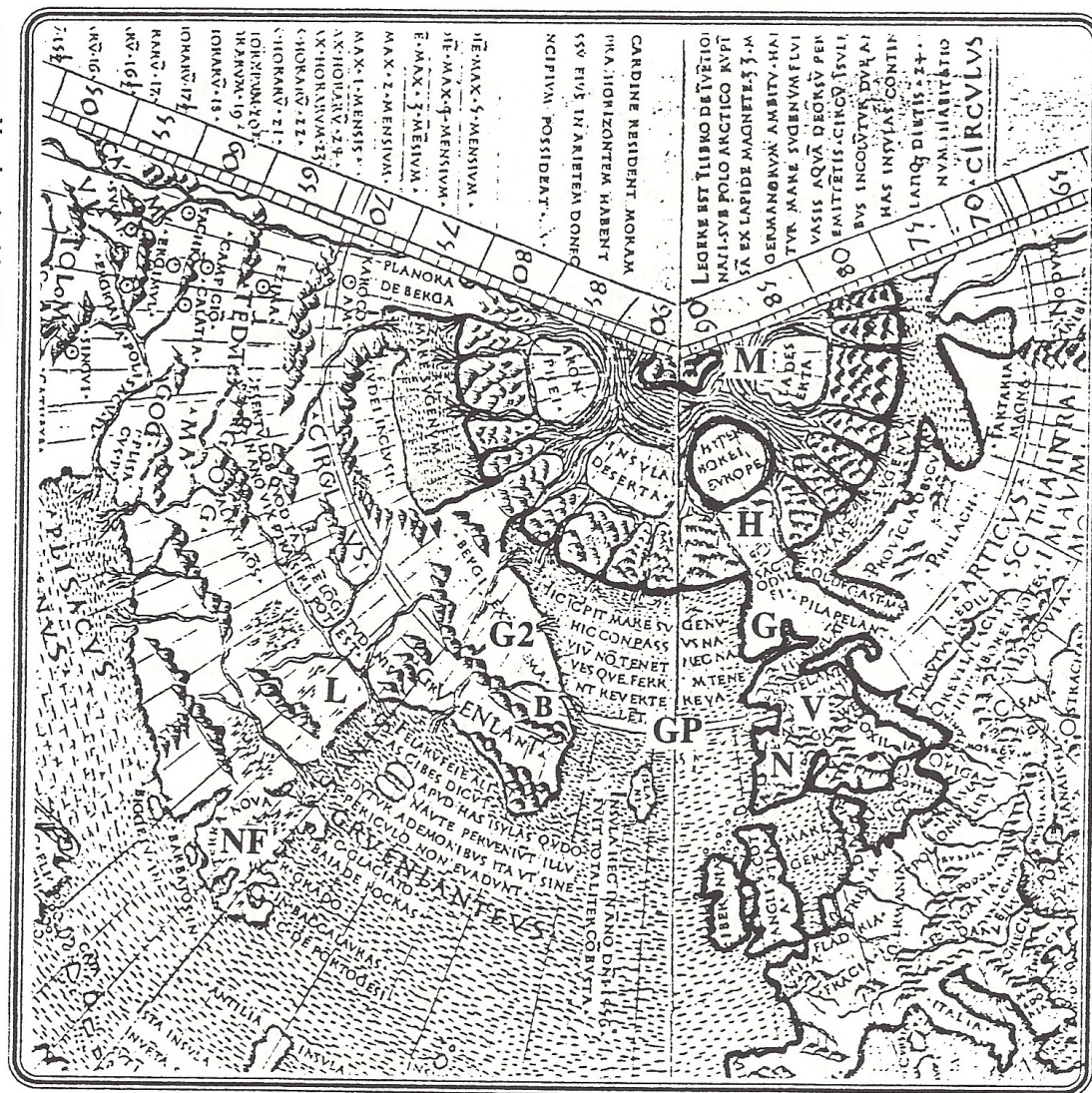
An interesting, but almost illegible, inscription near *Gruenlant* reads: *Hic compassus navium non tenet nec naves quæ ferum tenent revertere valent*. [Here the ship's compass loses its property, and no vessel with iron on board is able to get away]. This belief probably arose from the variation of the compass needle, which was noticed by Cabot. This inscription doubtless refers to the experience of the second expedition of the Cabots, which it is believed Ruysch may have accompanied.

The Ruysch map (#313) is instructive concerning the location of Greenland on late 15<sup>th</sup> century maps and those of the 16<sup>th</sup> century. As shown below, according to Gunnar Thompson, on the Norwegian peninsula (N) we find *Ventelant* (V) near the Arctic Circle. This is an archaic placement for *Vinland*, which was thought to be north of Norway. In like manner, there is a second peninsula above Norway that usually represents Greenland (G) on most maps of the period. Above this is *Hyperborea Europa* (H) which is a carryover from the *Norveca Europa* of the *de Virga* map of 1414 (#240) where it was presumed the *Hyperboreans* lived near the North Pole. Across the vertical ocean or *Ginnungagap* (GP) is a caption that cautions mariners not to rely upon compass bearings as the compass fails in this region. Usually, maps had this caption southwest of Greenland – thus one may be on good grounds for identifying the land here called *Gruenlant* as Labrador (L). Since most

historians have assumed this is simply another frivolous naming – we can understand the controversy over whether the Spanish navigator Fernandez (*The Labrador*) actually discovered Greenland or Labrador. On the other hand, we know that several cartographers identified the North American mainland as “Greenland” so the label for Labrador on this map is not so unusual.

Ruysch, in 1508, made a bold stroke by putting *Gruenlant* down as a peninsula of Northeastern Asia, thus trying to reconcile the discoveries of Columbus with the northern sagas.





On the margin of the map, near the North Pole, is another interesting inscription referring to the magnetic pole, which it is said was first located by the English friar Nicolas de Linna, who made a voyage to the north in 1355 and presented to Edward III of England an account of his discovery, with the title, *Inventio fortunat*. From this report Mercator said he derived his idea of the four polar islands (#407). These islands are also seen on the map of Ruysch, who placed the magnetic pole on an island north of Greenland. The pole is now located in Prince Albert Island. The inscription mentioned above reads: "It is said in the book concerning the fortunate discovery that at the arctic pole there is a high magnetic rock, thirty-three German miles in circumference. A surging sea surrounds this rock, as if the water were discharged downward from a vase through an opening. Around it are islands, two of which



are inhabited.” The legend of a huge magnetic mountain, dragging to it all vessels with iron aboard, was a long-standing myth of terror mentioned by Ptolemy and later elaborated by the Arabs.

This world map by Johannes Ruysch shows four islands around the North Pole; two (the one north of Greenland and its opposite across the Pole) are labeled *Insula Deserta*; the one north of Europe is that of the *Hyperboreans*; and the one north of America is labeled *Aronphei*. Ruysch labels the waters within the four islands as the *Mare Sugenum*, and speaks of a violent whirlpool that sucks the incoming waters down into the earth; in addition, his map shows a ring of small, very mountainous islands around the four islands, which numerous islands Ruysch says are uninhabited.



World map by Johannes Ruysch, 1508 (#313)





Detail of the Ruysch map showing Greenland as an extension of Asia

The world map in 1511 by Vesconte Maiolo [de Maggiolo], shown below (#316), is drawn with a north polar projection that provides its distinctive fan shape. Its format resembles the maps of Contarini and Ruysch (#308 and #313), which are derived from conical projections. Maggiolo has not attempted to display the full 360 degrees of the sphere; less than 200 degrees appear, leaving East Asia and the Ocean Sea incomplete.

The single Arctic and North Atlantic landmass at the top indicates that the location of the new discoveries was still thought to be in far northeastern Asia. Maggiolo's map shows a solid Eurasian continent running from *Noruega* [Scandinavia] around the North Pole, including Asia's arctic coast, to Newfoundland-Labrador and Greenland. On the extreme northeast promontory of North America, Maggiolo place-names include *Terra de los Ingres* [Land of the English], and *Terra de Lavorador de rey de portugall*. Further south, we notice *Terra de corte reale de rey de portugall* [Land of the Corte-Real and of the King of Portugal] and



*terra de pescaria* [fishing grounds]. Just westward the presence of the name *India Occidentalis* [West Indies] appears for perhaps the first time on a map.

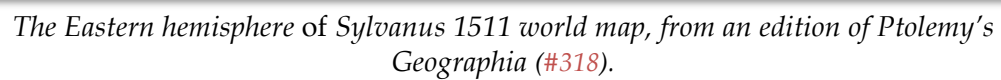


Polar world map of 1511 by Maggiolo (#316)  
showing Greenland as a peninsular extension from Asia.

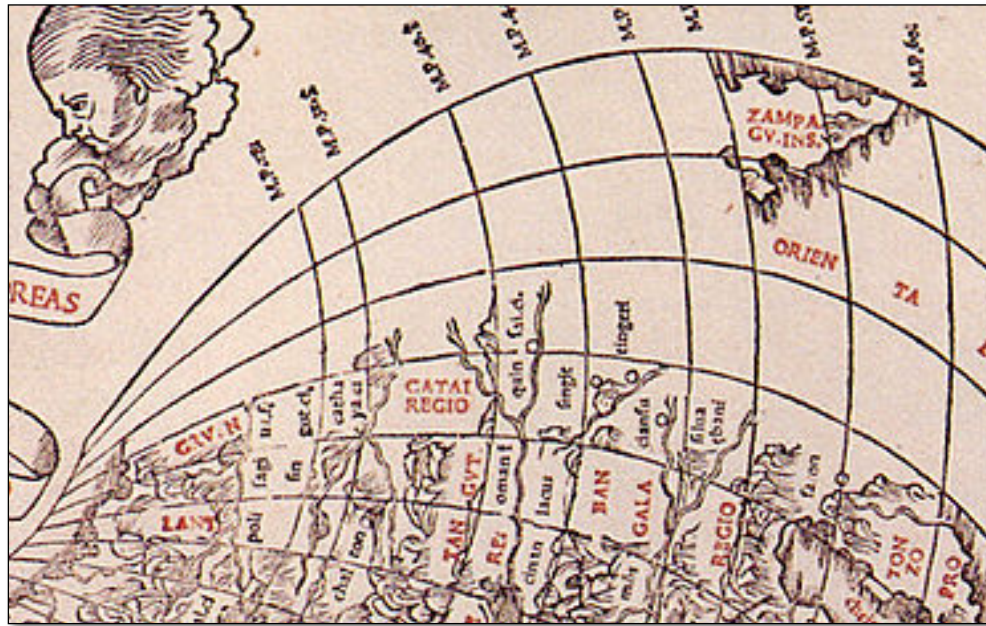


*Detail: showing Greenland as part of the Eurasian landmass*









*Detail of Sylvanus map showing GRVENLANT [Greenland], which Sylvanus integrates fully into the Asian continent, placing it due north of CATAI REGIO [Cathay].*





Redrawing of the Paris wooden globe (1535) from Harrisse (#357).  
Note the merging of the New World discoveries with the Old World (Asia), including Greenland

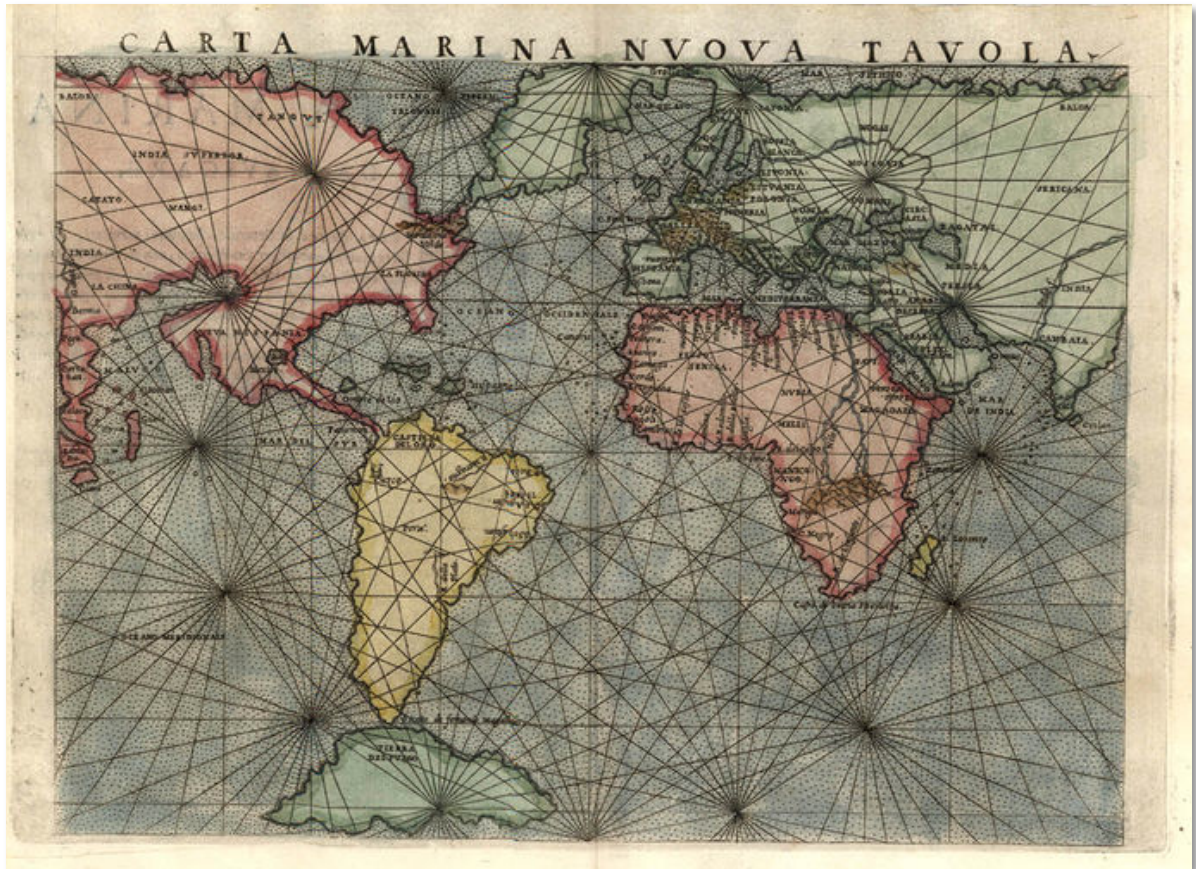


*A polar view of the Paris Wooden Globe, 1535 (#357) showing Greenland as an extension of the Eur-Asian-American continent*





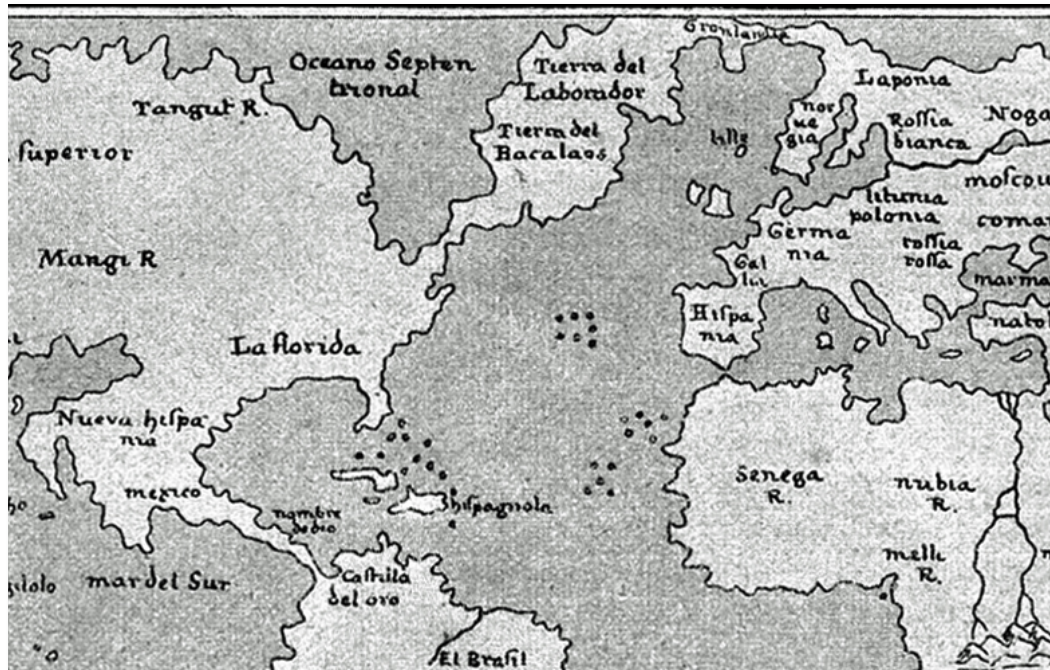
*Grolandia [Greenland] as displayed on a redrawing of the Nancy globe, 1530-40 (#363) as part of the Asia-America continent*



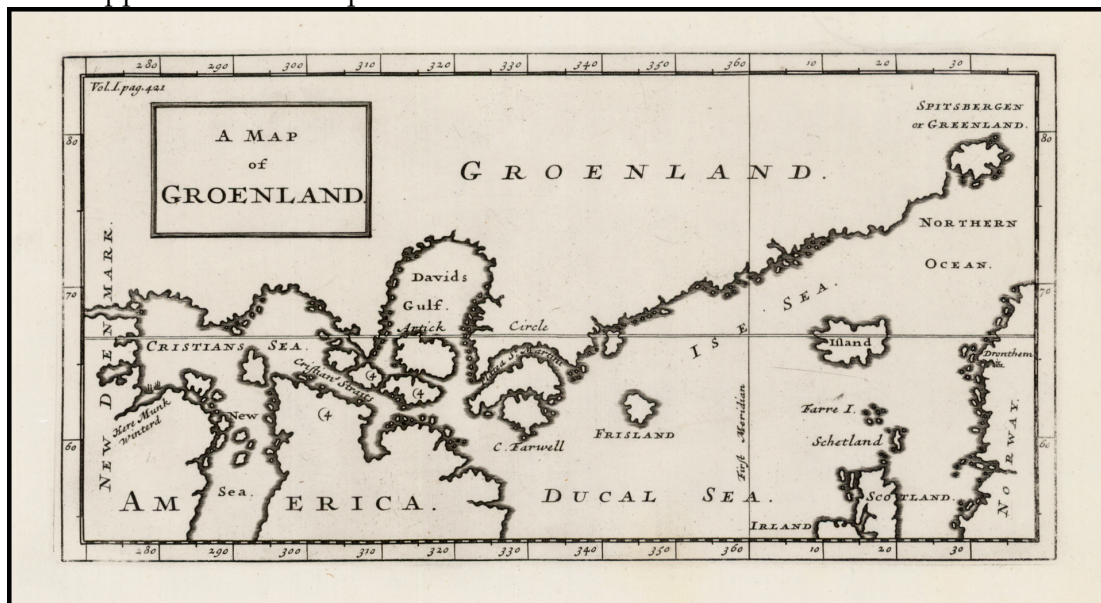
World map by Girolamo Ruscelli, 1561 (#383)

This sea chart of the world depicts the entirety of the continental northern landmasses as an unbroken ring around the globe. North America and Asia form a single mammoth continent, which in turn connects to northern Europe via Greenland. The Asia-America connection, began by Christopher Columbus, was a standard concept, and one of which Gastaldi and Ruscelli was a particularly strong endorser (although Gastaldi completed changed his position 20 years later and separated North America from Asia). This map's linking of North America and Europe is highly unusual, however, but was a natural consequence of two errors: on the east, Gastaldi depicts Greenland as an elongated east-west outgrowth of Scandinavia, a peculiar pattern used by Waldseemüller (#310) earlier in the century; on the west, he adopts the *Verrazanian* model for North America which had been sanctioned by Sebastian Münster in 1540 (#347) and many others before and subsequently. In combination, these two flawed elements stretched out over the North Atlantic and, quite logically, joined.





Mercator's famous 1569 *Nova et Aucta Orbis ...* world map shows Greenland as an island, the northwestern part of which contains a large bay dotted by some islands at its entrance. Compare this area with a modern map of Northern Greenland, showing Independence Fjord and the bay to the fjord with islands at the entrance. Note also the elbow at the bottom of the entrance to Independence Fjord, which appears on both maps.



*Map of Groenland, 1653, by De la Martinière*

Scarce map centered on Greeland and focusing on the passage in the North Atlantic from Europe to Hudson's Bay. The map shows the location of where Henry (Jens) Munk wintered in 1619-20. Jens Munk was a Danish explorer. On May 9 1619, he

undertook a voyage on behalf of the King of Denmark, Christian IV, with 65 men and His Royal Majesty's two ships. His mission was to discover the Northwest Passage to the Indies and China. His crew included Rasmus Jensen, Church of Denmark priest today recognized to be the first Lutheran cleric in Canada.

Munk penetrated Davis Strait as far north as 69°, found Frobisher Bay, and then spent almost a month fighting his way through Hudson Strait. In September 1619 he found the entrance to Hudson Bay and spent the winter near the mouth of the Churchill River. The conditions killed all but Munk and two of his men. With these men, he sailed for home with the *Lamprey* on July 16, 1620, reaching Bergen, Norway, September 20, 1620.

In the map of 1653, made by De la Martinière, who was of the Danish expedition to the north, Greenland was made to connect with Northern Asia by way of the North pole. Nordenskjöld calls him the *Münchhausen* of the northeast voyagers; and by his own passage in the *Vega*, along the northern verge of Europe, from one ocean to the other, the Swedish navigator has of recent years proved for the first time that Greenland has no such connection. It yet remains to be proved that there is no connection to the north with at least the group of islands that are the arctic outlyers of the American continent.

Independence Fjord in northeast Greenland was named by Robert E. Peary on America's birthday on July 4, 1892 when he was the first non-Inuit to get there. Independence Fjord is slightly above latitude 82° N, and no one from western civilization had been to this area until Admiral Robert Peary got there in 1900 by sledge. Prior to his discovery of Independence Fjord, the area remained uncharted and unknown. In fact Lauge Koch, in his Survey of North Greenland, states that from 1616 to 1852, latitude 78°20'N marked the limit of western geographical knowledge of Greenland, in that it marked the limits of navigation. From 1852 to the early 1900s, geographical knowledge of North Greenland was gradually broadened, principally by sledge journeys. Indeed, the leading geographer of the 19<sup>th</sup> century, August Petermann, believed that Greenland extended across to Siberia, based upon the fact that Siberian driftwood was found in Europe, but not generally on the west coast of Greenland itself.

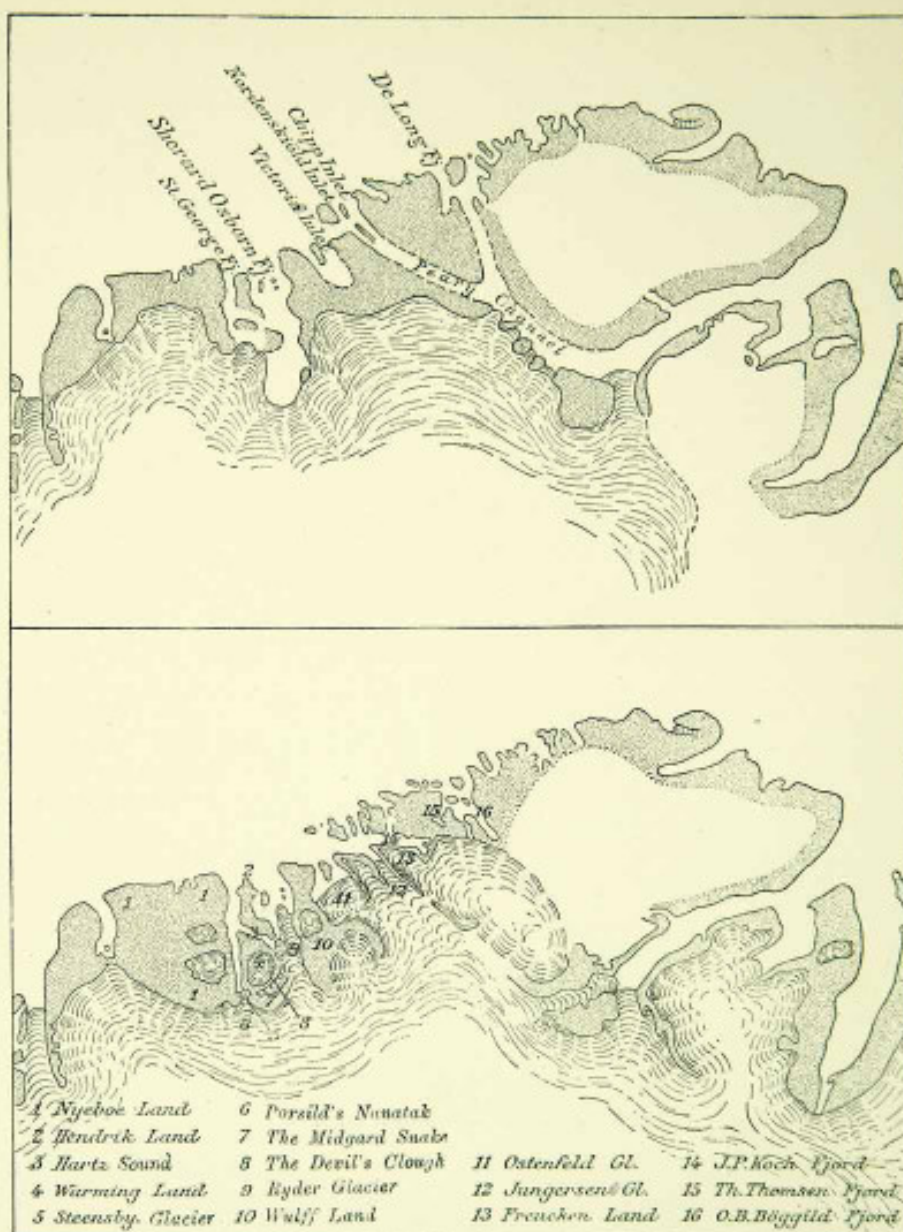
Lauge Koch, renowned leader of 24 Danish government expeditions to Greenland spanning almost half a century, was born July 5, 1892 and died June 5, 1964 in Copenhagen. Dr. Koch's unique series of explorations began in 1913 in West Greenland. During 1916 and 1917 he accompanied Knud Rasmussen on the second Thule Expedition to northwest Greenland. From 1920 to 1923 Lauge Koch was leader of the remarkable Bicentenary Jubilee Expedition (to commemorate Hans Egede's arrival in Greenland) when he performed, together with three Eskimos [Inuits], the strenuous 200-day sledge journey along the north coast of Greenland, which resulted in the Atlas of north Greenland (24 maps at the scale 1: 300,000). On this journey Koch discovered a depression that, in his opinion, was the one that Robert Peary in 1892 had mistaken for a channel. Koch's observations of the interior of Independence Fjord led to considerable cartographic changes compared with the Peter Freuchen map of 1912. Although an 1865 map by Lauge Koch adheres to Petermann's theory, the theory was gradually abandoned as more information was obtained throughout the 19<sup>th</sup> century, particularly with the drift of Fridtjof Nansen's *Fram* vessel across the north ocean in 1894-1895. The *Fram* drifted from the Pacific Ocean off Siberia at the New Siberian Islands to Spitsbergen in the North Sea. The final blow to



Petermann's theory occurred when Oliver Peary traveled around the north of Greenland.



*Peter Freuchen map of the route of the first Thule Expedition. 1912*



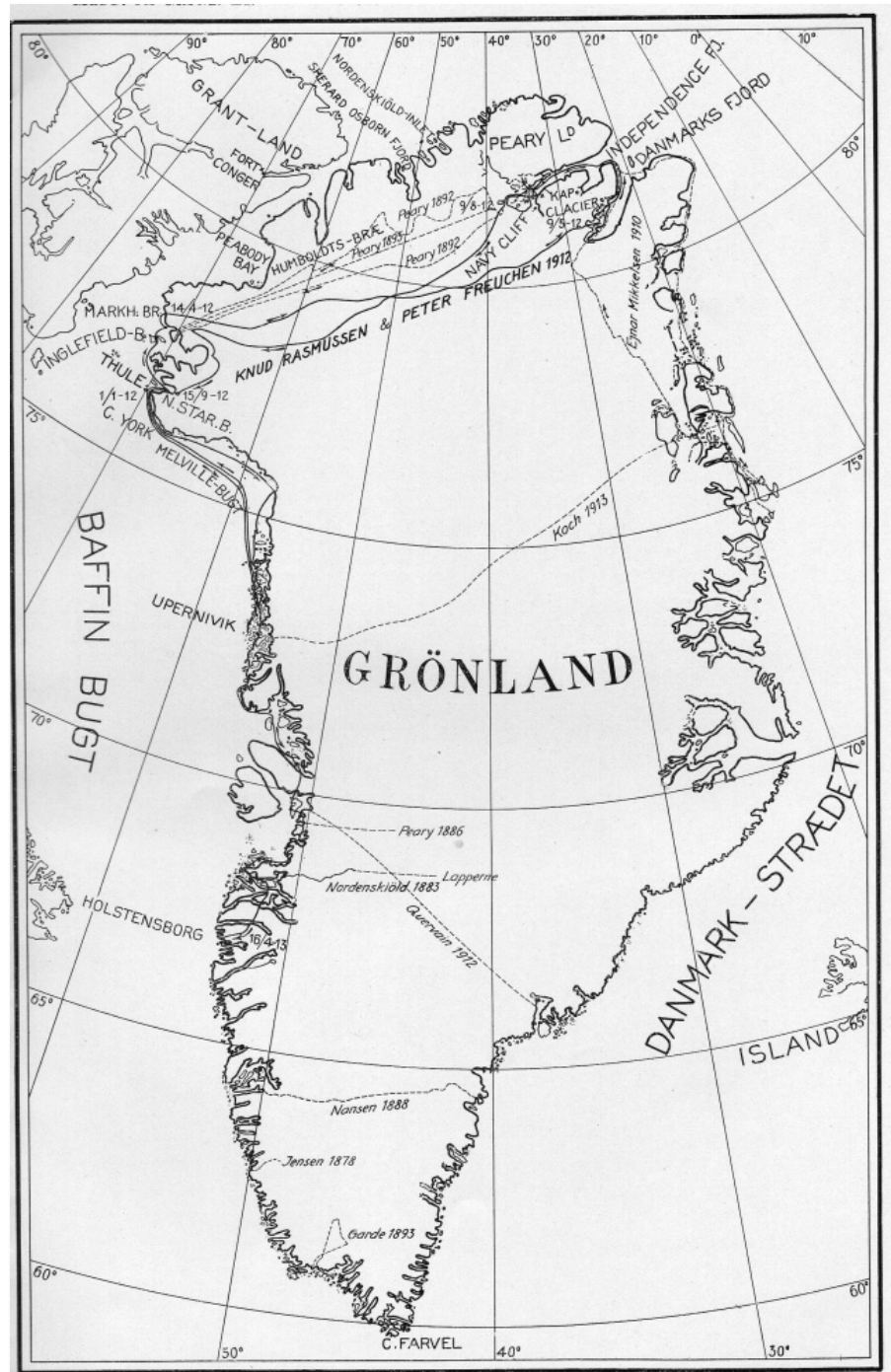
THE UPPER MAP SHOWS THE NORTH COAST OF GREENLAND AND THE DISTRICT ROUND INDEFATIGABLE FJORD WITH PEARY CHANNEL, AS KNOWN PREVIOUS TO THE FIRST AND SECOND THULE EXPEDITION

THE LOWER MAP SHOWS THE SAME DISTRICT MAPPED BY THE THULE EXPEDITION

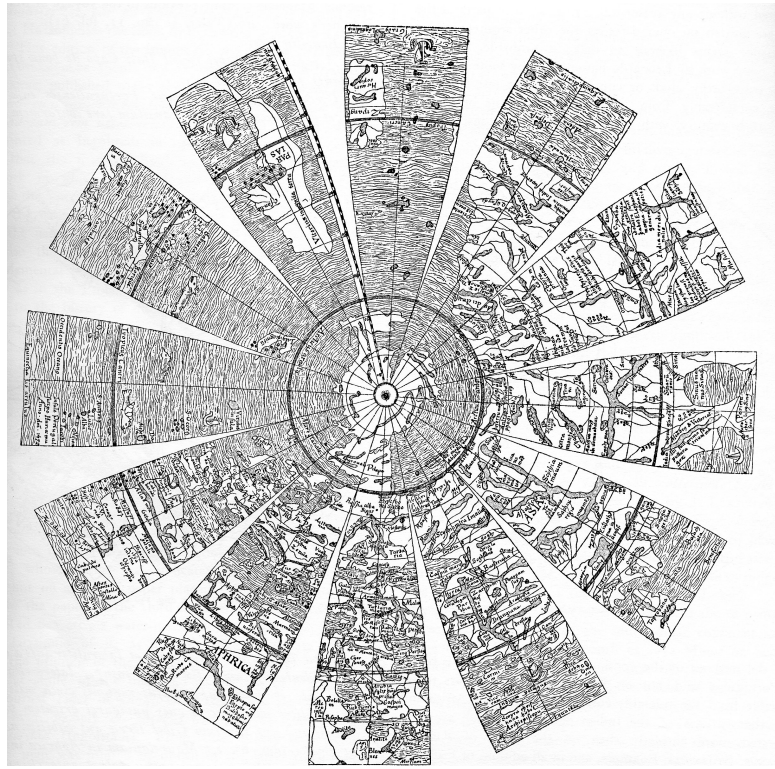
Maps of North Greenland before (top) and after (bottom) the First and Second Thule Expeditions from Rasmussen (1923)



In the 19<sup>th</sup> and 20<sup>th</sup> centuries Greenland mapping and early science was done painstakingly via sled dog teams by hardy people and adventurous spirits who had to find and hunt game to avoid death by starvation. Rasmussen, Freuchen, and their Inuit companions Uvdloriaq and Inukitsoq set out over Greenland's inland ice from Thule on April 19, 1912 with 54 dogs to return five months later with only eight dogs.

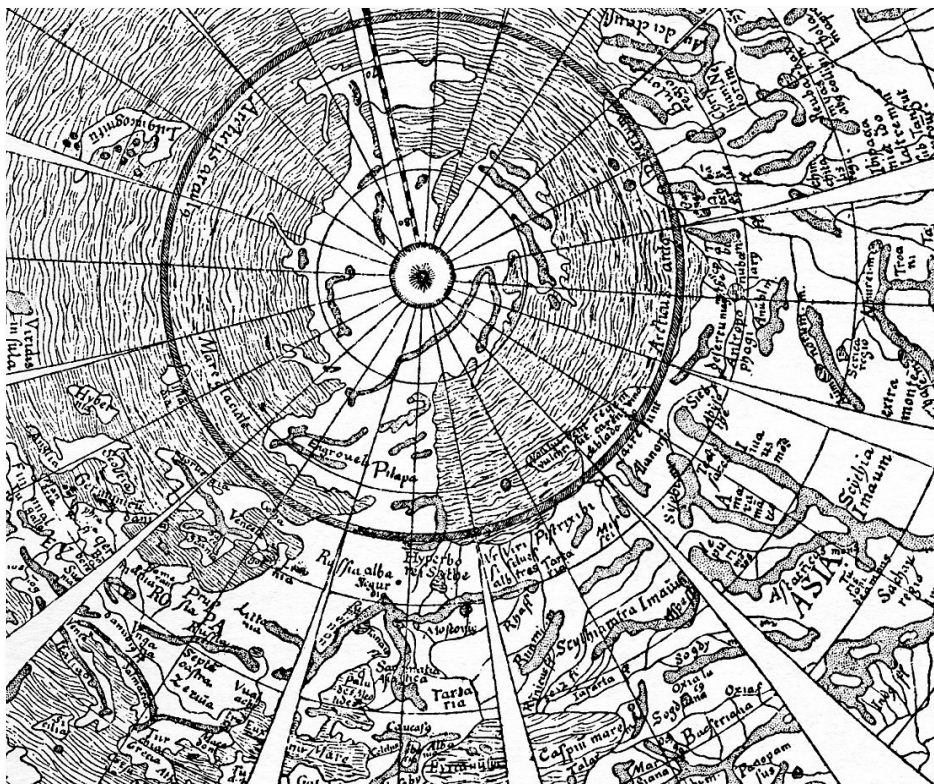


Greenland as part of a polar landmass.

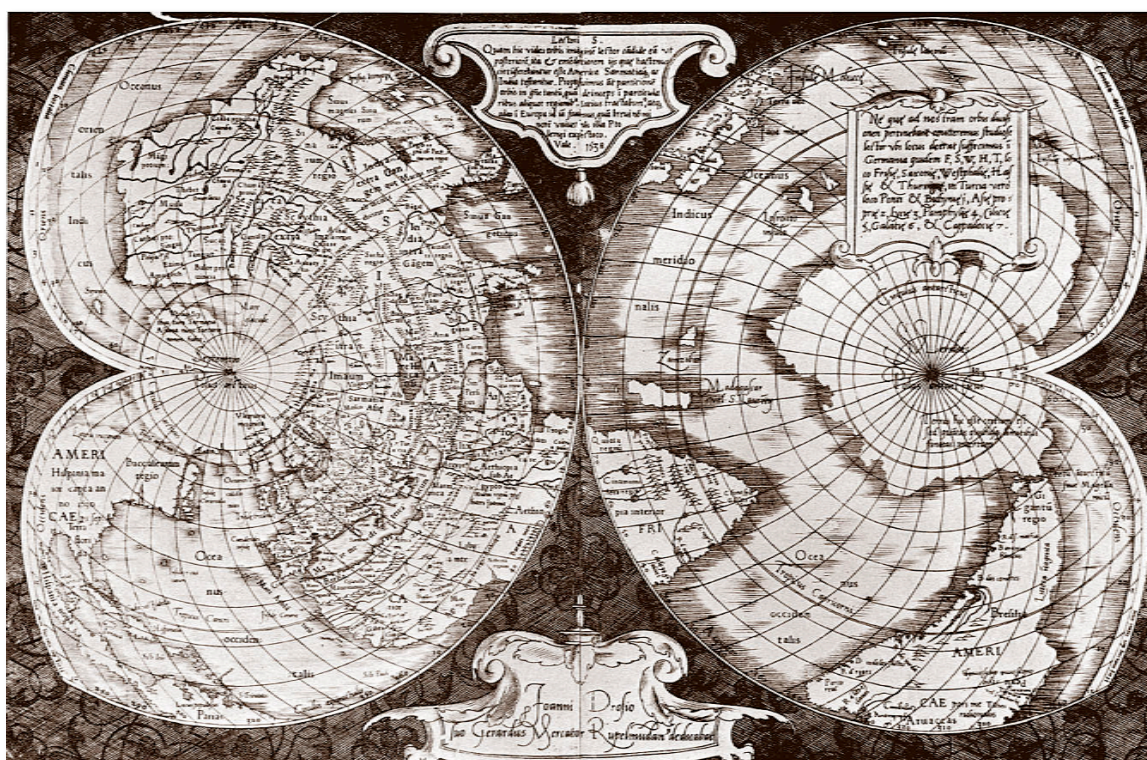


*Johannes Schöner 1515 globe gores: North Pole, a facsimile from Jomard/ Nordenskiöld  
(#328)*





*Detail: Greenland displayed as part of a polar landmass*



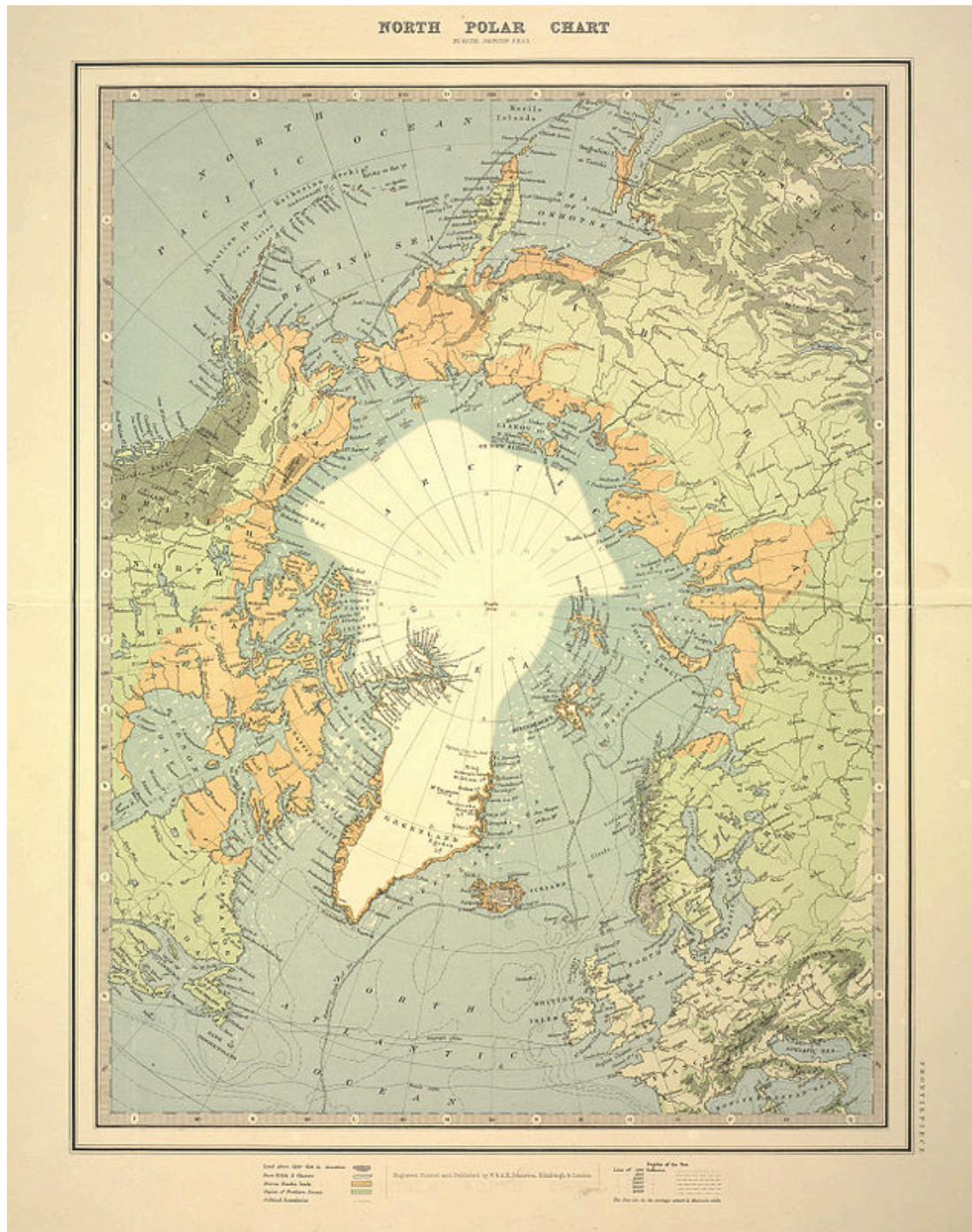
*Polar world maps by Gerard Mercator, 1538*





Detail: showing Greenland as part of a polar landmass extending out of Asia





Late 19<sup>th</sup> century map of the North Pole by Alexander Keith indicating Greenland as an extension of possibly some polar landmass



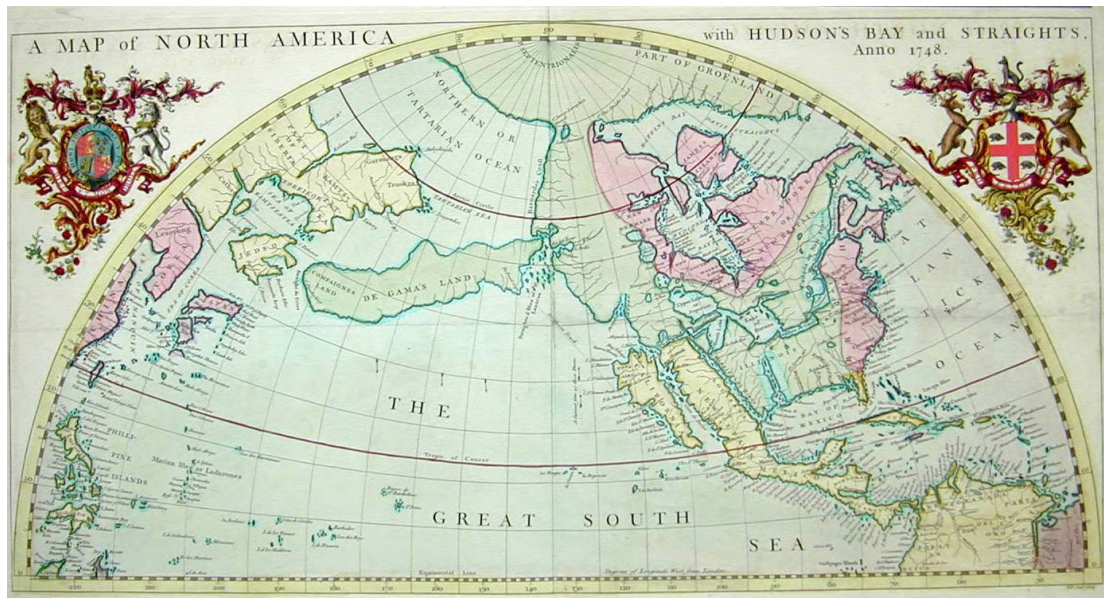
Jansson's map of the Arctic regions from 1644. Shows Baffin, Button and James Bay, Greenland, Iceland, Spitsbergen, Lappland, Novaja Semlja, Russian and Asia coastline, etc. This configuration would not change for another 200 years as seen in the following examples.





A world map, 1772

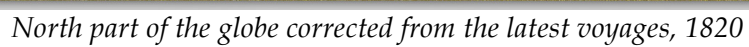
It is impossible to draw any sort of pattern out of such positional chaos. The truth seems to be that 15<sup>th</sup> century and subsequent geographers simply did not know where Greenland was or what it was, that their sources of information were confusing and contradictory, and that it was merely a question of which one a cartographer chose to follow. The Norse colony in Greenland fizzled out by the middle of the century; the last record of contact is a papal letter of 1418 stating that church services were still being held. With the state of communications at the time, it is understandable that to the dominant cartographical circles of the Mediterranean area, Greenland could within fifty years' time become a vaguely remembered "Somewhere on the edge of Nowhere".



*Map of North America with Hudson's Bay and Straights, 1748, John Seller*











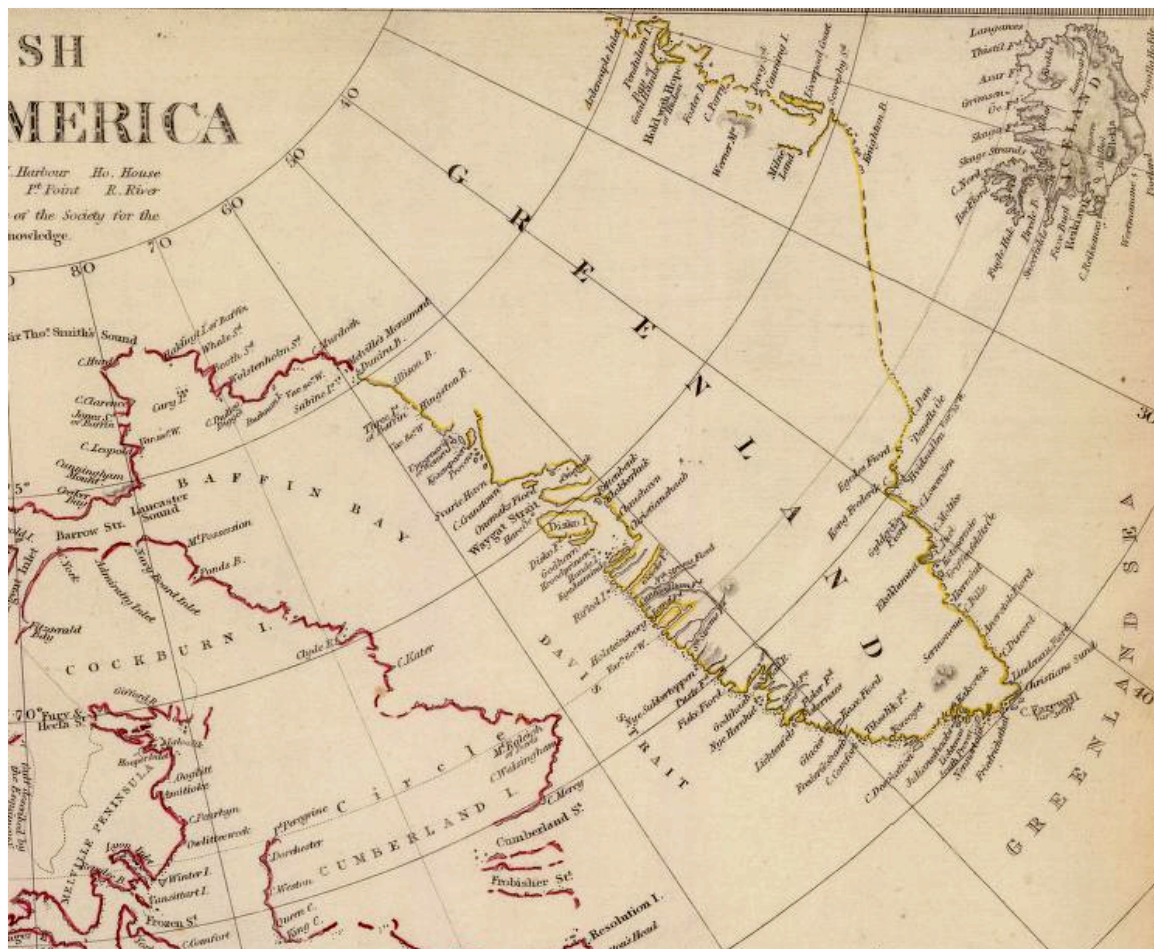
Above is a fine 1799 map of the northern polar regions by the English map publisher Clement Cruttwell. This map covers the polar regions from roughly 60 degrees north latitude to the North Pole. Reveals a primitive yet ephemeral understanding of Arctic geography. Evidence of the exploratory work of Tschirikow and Vitus Bering is clear in the northeast parts of Asia and Siberia. However, the geography of North America across the Bering Strait is less clear with no significant inland detail and only a cursory nod to the important navigations of Cook. The northern coastline from Greenland to Alaska is extremely vague with Baffin Bay being entirely enclosed and the northwestern coastland disappearing altogether. Although not specifically named, Cruttwell marks the explorations of Herne along the Coppermine River and his sighting of the Coronation Gulf at roughly 70 degrees north latitude. Cruttwell also notes but does not specifically reference the explorations of McKenzie northward from Great Slave Lake along the McKenzie River and his own important sighting of a great body of fresh water (probably Great Bear Lake) at roughly 70 degrees. Hearn and McKenzie's exploratory work finally ended the popular speculation that a northwest passage



might be accessible from the Hudson Bay. Outline color and fine copper plate engraving in the minimalist English style prevalent in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. Mountains and topographical other detail shown by profile. Drawn by G. G. and J. Robinson of Paternoster Row, London, for Clement Cruttwell's 1799 Atlas to Cruttwell's *Gazetteer*.



*British North America, 1834, by the Society for the Diffusion of Useful Knowledge*



Detail showing a yet unfinished coastline for Greenland



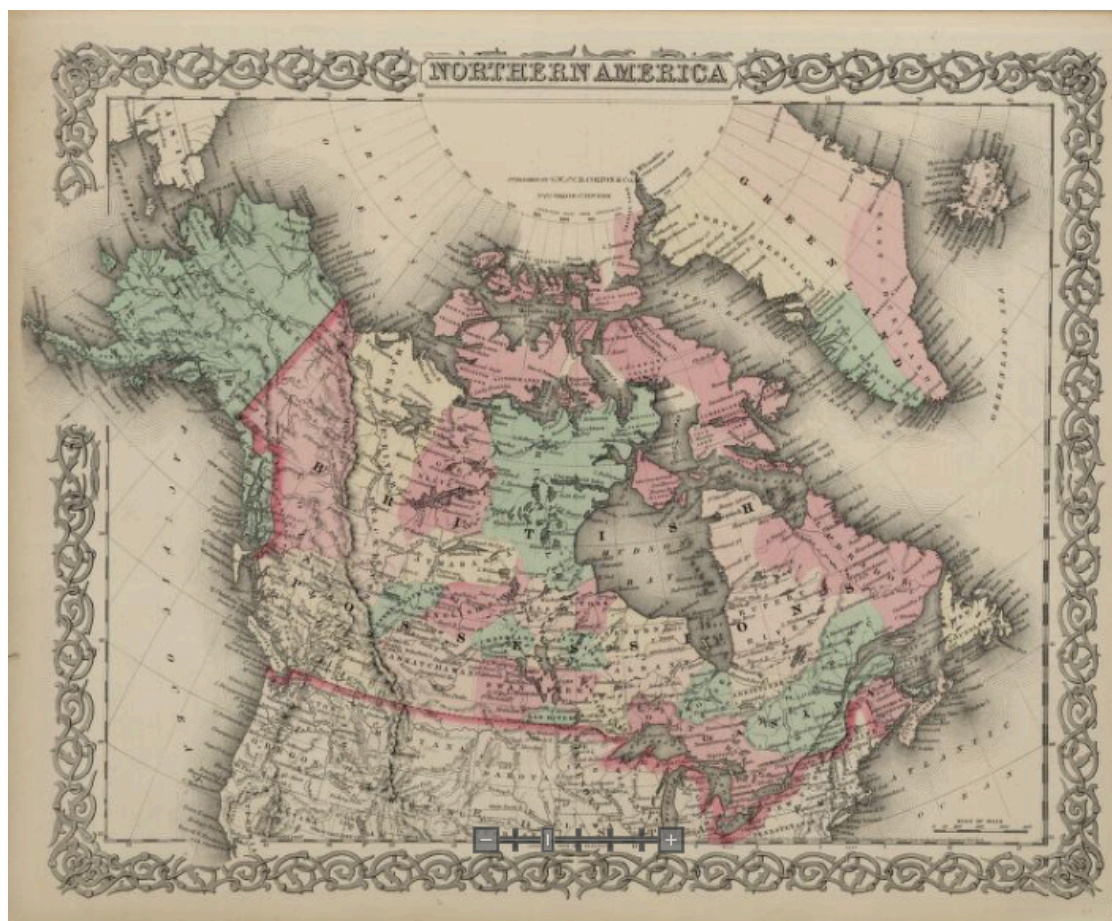


1860 Mitchell Map of North America : showing Russian America, Danish America, British America, United States, Central America and West Indies





Detail: Greenland as "Danish America"



Map of Northern America, 1869 by G.W. Colton









1872 polar map by J.H. Colton

A rarely seen variant state of Colton's map of the North Pole or Arctic. Covers from Lake Baikal, the Hudson Bay, the British Isles and Kamchatka north to the Pole. Generally gives an excellent overview of the state Arctic exploration and discovery to about 1855. Prepared by G. W. and C. B. Colton as map no. 13 in the 1872 edition of Colton's *Atlas of The World*.





1920 map of Greenland from *Salmonsens Konversationsleksikon*



In *Kalallit Nunaat* [Greenland], the Inuit people are known for carving portable maps out of driftwood to be used while navigating coastal waters. These pieces, which are small enough to be carried in a mitten, represent coastlines in a continuous line, up one side of the wood and down the other. The maps are compact, buoyant, and can be read in the dark. Some claim that these maps were not used for navigation, but for story-telling. The driftwood maps really make no use of cardinal directions. They are made to be read in a continuous loop, up one side and down the other. This makes the maps less a depiction of a region than a document of a journey.



These three wooden maps show the journey from Sermiligaaq to Kangertittivatsiaq, on Greenland's East Coast. The map to the right shows the islands along the coast, while the map in the middle shows the mainland and is read from one side of the block around to the other. The map to the left shows the peninsula between the Sermiligaaq and Kangertivartikajik fjords.

Cartographers say the gorgeous, enigmatic Inuit driftwood maps are 3-D variations of "straight line diagrams" or "strip maps." A straight line diagram is a very stylized road map of a single road or set of roads. As the name indicates, the road is shown as a straight line. Highway and subway maps are versions of straight line diagrams. The "road" on the straight-line-diagram driftwood maps is the Greenlandic coastline itself. In Greenlandic driftwood maps, the carved wood is the ocean, while empty space is land. (Holes are islands, for instance.) This makes the maps mirror images of the coastline, not the coastline itself.



Raymond Ramsay summarizes the confusing depiction of Greenland in the following passage from his book.

"There is no better way to illustrate the Peregrinations of Greenland up to the time of serious voyaging in search of it than by listing its varying appearances on the map through the 15<sup>th</sup> century.

- The Genoese World Map of 1447 (#248) shows a Greenland connected with Europe, following Claudius Clavus.
- The Fra Mauro Map of 1459 (the first European map to show Japan, and a fairly accurate representation of the shape of Africa, #249) shows Greenland as a western promontory of northern Scandinavia.
- A map accompanying the 1467 edition of Ptolemy copies Clavus, but appears to be the first influenced by him that does not show Greenland connected with Europe.
- The Catalan map of circa 1480 shows an oblong "*Illa Verde*" (literal translation of "Green Land") in the latitude of Ireland, and associated with the island of *Breasil*.
- The Nicholas Donis Map of 1482 shows a roughly correct Greenland unconnected with Europe, but duplicates it with another island of "*Engronelant*." This confusion between two names for the same island recurs.
- An anonymous map of about this same time shows "*Gronlanda*" in approximately the proper place, but duplicates it with "*Engroneland*" as an island to the north of Norway; and to the north of this places "*Pillappelanth*" (Lapland), the "last habitable land."
- The Martin Behaim Globe of 1492 (#258) once more makes Greenland an Arctic peninsula north of Norway.
- The Johann Ruysch Map of circa 1495 (#313) places a small "*Gruenlant*" west-southwest of Iceland [*Islant*].
- Juan de la Cosa on his map of 1500 (#305) makes Greenland one of a congeries of small islands to the north of Iceland.

Corte-Real's three sons sank the entire family fortune into rediscovering the land their father had visited. The youngest son, Gaspar, in 1500 commanded a voyage which had no luck, and then in 1501 another which cost his life but from which two of his ships returned with news of the rediscovery of Greenland and of the *Tierra do Llabrador*, which explains that northern American region's having a Portuguese name. *Llabrador* in old Portuguese literally meant "laborer," but was also the term for the sort of second-rank nobility known in Spanish as "hidalgo" and in English as "gentleman." There are several theories as to why this name should have been applied to this territory, but its Corte-Real origin is certain. Gaspar Corte-Real must be given the credit for the actual rediscovery of Greenland. His elder brother Miguel sailed in 1502 to take effective possession of those lands, but nothing more was ever heard of him. The Corte-Real discovery had quick geographical impact. Maps now dropped the old suppositious Greenland north of Norway, and moved it back to its proper position in the west Atlantic. The Cantino map of 1502 (#306) places it on the eastern (Portuguese) side of the *Line of Demarcation*, and makes it too small and too far south, but at least shows awareness of the latest Knowledge.

The further history of the peregrinations of Greenland is mainly cartographical, so we may as well at this point give a quick windup of the voyages that searched it out. The Corte-Real voyage had largely taken it away from the Danes and turned it over to Portugal, but the Portuguese failed to follow up, and Greenland remained no one's land. King Christian II of Denmark projected a voyage to Greenland in 1513, but circumstances prevented its taking place; and the same was true in 1522, when King Frederick I entertained a like project. In 1578 Frederick II did send an expedition commanded by one Magnus Henningsen, who sighted the coast but did not land. It was about this same time that Martin Frobisher landed on southern Greenland, mistook it for Friesland, and took possession of it as West England.

From this time on, Greenland was an area quite well known to the world. The various English expeditions in search of a Northwest Passage combed its coasts at least up to 75° N. During the early 17<sup>th</sup> century the Danes sent out several voyages, four of them piloted by James Hall, an Englishman, who in 1612 was to be pilot to the great William Baffin and to be killed in a petty skirmish with the Greenland Eskimos. Throughout the 17<sup>th</sup> and 18<sup>th</sup> centuries, Greenland was familiar ground to whalers and sealers of all nations. It was the 1721 voyage of the famed missionary Hans Egede that re-established the Danish claim to Greenland. Egede went out with the idea of rediscovering the remnants of the lost and by now half-fabulous Norse colony and preaching to them Christianity of the Protestant sort, but, failing to find them, he remained to preach to the Eskimos. And it was the voyage of Wilhelm Graah, of the Danish Navy, in 1832, that turned up the first discovered relics of the old Norse colonists, and clinched the Danish claim, which has stood ever since. The exploratory data has thus been summarized, The cartographical data is not so simple.

Greenland had been made part of Europe, and now briefly it was to be shown as part of Asia. South America came to be known and recognized as a new land in the years immediately after Columbus's discovery, but North America was "regarded as quite possibly an eastward extension of the Old World. Such was the concept behind the famed Contarini map of 1506 (#308). The Isthmus of Panama attaches South America to Asia; there is no North American continent, but a tremendous elongated peninsula sticks out like a sore thumb into the longitudes where this continent should be, and its eastern terminal points are identical with the names of the Corte-Real discoveries--Greenland and Labrador.

Displacements and disassociations of Greenland usually involved one of two errors: duplication or revival of that land-bridge. The duplication is easily explained. After the Corte-Real discovery had restored Greenland to the maps as a known reality rather than a romantic article of faith, it became common practice for cartographers to translate "Green Land" (*Groenland*, or *Gronland*, or *Engroenland*, or however spelled) into the language in which they worked, This placed a vaguely known *Green Island* (in whatever language) on the maps, and it quickly became dissociated from the real Greenland.

The Coppo map of 1528 (#341) places an *Isola Verde* in about the correct position. But as Greenland became better known, and its Nordic name more standard, cartographers came to make the mistake of assuming two islands to fit the duplicated names.



Throughout the 16<sup>th</sup> century and well into the 17<sup>th</sup> maps showing an awareness of the real Greenland would also include a "Green Island" (*Isla Verde*, or *Insula Viridis*) somewhere in American waters, usually in the North Atlantic, proving the association of the name with that region.

But not all of the Green Islands were a result of this mistake. In 1503 Rodrigo Bastidas sailed from Seville to the West Indies and discovered a small island near Guadeloupe which he named *Isla Verde*, and it is shown on Peter Martyr's map of 1511. Obviously here the name had reference to the vegetation, and no confusion with Greenland is involved.

The imaginary North Atlantic Green Island was to have a long life, but in the meantime a lesser duplication of Greenland had occurred. In the late 16<sup>th</sup> century, maps began showing Greenland flanked to the westward by a much smaller island of *Grocland*.

The standard placing of this island to the west of Greenland seems to indicate some early awareness of Baffin Island. The name *Grocland* undoubtedly originated from the spelling of Greenland as *Groeland*, with, a tilde, the same stylized abbreviation that seems to have caused Nicolo Zeno to read Sinclair as Zichmni. It is easy to see how the tilde could be overlooked, and the e read as a c, and how the aforesaid technique of including enough islands to match the names could have been applied.

But Ramsay have come no closer than any previous student to clearing up the question of what map was first responsible for the *Grocland* error and precisely what caused *Grocland* to vanish from the map. The earliest map that I know to show *Grocland* is the Mercator of 1569, the latest the Mathias Quadus map of 1608. The Hessel Gerritsz map of 1612, illustrating Henry Hudson's discoveries, shows a quite good Greenland with land to the west, but no *Grocland*. Actually, *Grocland* had a relatively short run on the maps, but since it occurred in time to be included in the great classics of early cartography, it attained a greater fame than it actually merited.

Ortelius in 1571 reduced the mighty Greenland to a virtual squiggle, dwarfed by the mythical isle of *Estotiland* to its westward, and he placed his *Grocland* more to the north than the west, just beneath his imaginary unknown northern continent.

The Michael Lok map (#419) published by Hakluyt in 1582 shows a small Greenland just north of the mythical *Friesland*, and to the west of this, in the approximate position of Baffin Island, a much larger area designated as "*Jac. Scolvus Groctland*."

Meanwhile, among the Danes themselves, some more misconceptions were being recorded. The Royal Library at Copenhagen preserves a map drawn by Sigurdr Stefansson, an Icelander, in 1590, and apparently intended to illustrate old accounts or Norse discoveries in America. Greenland here appears in roughly the right shape and area, but as a vast peninsula of the American continent. Having already been part of Europe and Asia, it now becomes part of North America. All of the other place-names are taken from the Norse sagas of Leif Ericson's discovery: *Hvitserk* and *Herjulfness* in Greenland; and southward down the coast *Helluland*, *Markland*, *Promontorium Winlandiae*, and *Skraelingeland*.

But even more remarkable is the map drawn in 1605 by Johannes Resen, Rector of the Royal Danish University. It also makes Greenland a peninsula of North America, and duplicates all of Stefansson's place-names and coastal features, but it adds a couple out of more modern sources. *Friesland* and *Estotiland* are given from

the Zeno narrative (*Estotiland* being made equivalent with the *Helluland* of Stefansson), and south of *Vinland* is an inlet apparently supposed to be the Gulf of Saint Lawrence and labeled *Portus Jacobi Carterii Anno 1525* (Port of Jacques Cartier, Year of 1525 [should be 1535]). The easy explanation would be that Resen simply copied Stefansson with a few embellishments of his own; but in a marginal notation Resen stated that his map was several hundred years old (*ante aliquot centenios annos*). Possibly he worked from an original dating from the time of actual Norse contacts with North America.

It is impossible to draw any sort of pattern out of such chaos. The truth seems to be that 15<sup>th</sup> century geographers simply did not know where Greenland was or what it was, that their sources of information were confusing and contradictory, and that it was merely a question of which one a cartographer chose to follow. The Norse colony in Greenland disappeared by the middle of the century; the last record of contact is a papal letter of 1418 stating that church services were still being held. With the state of communications at the time, it is understandable that to the dominant cartographical circles of the Mediterranean area, Greenland could within fifty years' time become a vaguely remembered Somewhere on the edge of Nowhere.

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Those interested in still earlier maps on which Greenland appears, but with no resemblance to its actual outline, and clearly not based upon exploration, can consult A. A. Björnbo, *Cartographia Groenlandica*, Med. om Grönl., 48. 1910. 332 p., or R. H. Major, *The voyages of the Venetian brothers Nicolo and Antonio Zano, etc.*, Hakluyt Society, London, 1873.



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- 240 Albertin de Virga World Map, 1415
- 241 Andrea Bianco, 1436
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- 249 Fra Mauro, 1459
- 251 The *Zeitz* map, 1470
- 256 Henricus Martellus, 1489
- 306 The *Cantino* world map, 1502
- 307 The *Caveri* [Canerio] world map, 1502-05
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- 308 The *Contarini* world map, 1506
- 309 The *Kuntsmann II* world map, 1502-06
- 313 World map by Johannes Ruysch, 1508
- 314 The *Lenox* globe, 1502-04
- 316 Polar world map in 1511 by Vesconte Maiolo [de Maggiolo]
- 318 Sylvanus 1511 world map, from an edition of Ptolemy's *Geographia*
- 320 Martin Waldseemüller's *Carta marina* of 1516
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- 363 The *Nancy* globe, 1530-40
- 377 Sebastian Münster, 1540
- 378 Pierre Desceliers' Planisphere, 1550/1553
- 383 World map by Girolomo Ruscelli, 1561
- 391 The Forlani map of North America: *IL Disegno del scoperto della noua Franza*, c. 1565
- 398 *Universale Descrittione Di Tutta la Terra Conosciuta Fin Oui*, Paolo Forlani, 1565
- 406 *Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium emendate . . .*, Gerard Mercator, 1569
- 407 *Septentrionalium Terrarum descriptio*, 1595, a polar map by Gerard Mercator
- 417.1 John Dee's polar world map 1582
- 419 *Illustri viro, domino Philippo Sidnaeo Michael Lok civis Londinensis hanc chartam dedicabat:* 1582
- 431.6 The *Skálholt* map, 1590 map by Sigurd Stefansson
- 432 *Americæa Pars Borealis, Florida, Baccalaos, Canada, Corterealis*, Cornelis de Jode, 1593
- 433 Gerard de Jode's 1593 polar map
- 492 Heinrich Scherer, 1702

Variations of the name "Greenland" on early maps:

- *Isola Verde*
- *Illa Verde*
- *Insula Viridis*
- *Terra de Lavoradore*
- *Terra Laboratoris*
- *Terra viridis*
- *Groenland*
- *Groenlandia*

- *Groclandia*
- *Groelat*
- *Grolandia*
- *Grunland*
- *Grutlandia*
- *Groenlandica*
- *Grutlanda*
- *Groenlant*
- *Groenland*
- *Engronelant*
- *Engronelpieape*
- *Groenlandt*
- *Groelandt*
- *Groneland*
- *Gronland*
- *Gronlandia*
- *Pilapelant*
- *Grutladie*
- *Grutlandie*
- *Groullande*
- *Groullaude*
- *Gronelada*
- *Groclant*
- *Groêland*
- *Groenelanda*
- *Gruenlant*
- *Kalaallit Nunaat*

The following table lists the maps of Greenland illustrated herein in chronological order. Note that, initially, the maps depicted Greenland as a peninsula extending off the continent of Eurasia, except for the *King Hamy* and *Kuntsmann II* world maps in the early 16<sup>th</sup> century. Some of the maps are ambiguous as to whether Greenland is an island or part of a larger landmass, these are indicated with a “P”. Because of the harsh environment, the northern coast of Greenland remained speculative on maps. At the end of the 19<sup>th</sup> century and beginning of the 20<sup>th</sup> century, American explorers, including Robert Peary, explored the northern sections of Greenland, which up to that time had been a mystery and were often shown on maps as extending over the North Pole as a polar landmass, or as a part of the North American landmass. Peary discovered that Greenland’s northern coast in fact stopped well short of the pole. These discoveries were considered to be the basis of an American territorial claim in the area. But after the United States purchased the Virgin Islands from Denmark in 1917, it agreed to relinquish all claims on Greenland.



# Evolution of Greenland in Early Maps

5.19

Maps	Monograph	An Island	Greenland Portrayed as			
			A peninsula extending from			
			Europe	Asia	Polar Landmass	North America
<i>Portolano Laurenziano Gaddiano</i> [Laurentian Sea Atlas, or, the Medicean Atlas], 1351	233					
Albertin de Virga World Map, 1415	240		X			
Claudius Clavus, 1427			X			
Andrea Bianco, 1436	241					
The <i>Vinland</i> map, 1440 and Hans Poulson Resen, 1605	243	X (Vinland)				X (Resen)
Fra Mauro, 1459	249					
The Zeitz map, 1470	251		X	X		
Henricus Martellus, 1489	256		X			
Map of Germania from Schedel's Liber cronicarum, 1493			X			
The <i>Cantino</i> world map, 1502	306		P	X		
The <i>Caveri</i> [Canerio] world map, 1502-05	307		P	X		
The <i>King Hamy</i> world map, 1502	307.1	X				
The <i>Contarini</i> world map, 1506	308			X		
The <i>Kuntsmann II</i> world map, 1502-06	309	X				
World map by Johannes Ruysch, 1508	313			X		
The <i>Lenox</i> globe, 1502-04	314		X			
Polar world map in 1511 by Vesconte Maiolo [de Maggiolo]	316			X		
Sylvanus 1511 world map	318			X		
Johannes Schöner 1515 globe gores	328				X	

# Evolution of Greenland in Early Maps

5.19

		Greenland Portrayed as				
Maps	Monograph	An Island	A peninsula extending from			
			Europe	Asia	Polar Landmass	North America
The <i>Nova et integra universi orbis descriptio</i> [Paris Gilt or De Bure Globe], 1527	344	X				
Oronce Fine's <i>Nova, Et Integra Universi Orbis Descriptio</i> , 1531	352.1	X				
Guillaume Le Testu, 1566		P			P	
<i>Universi Orbis Seu Terreni Globi In Plano Effigies Cum privilegio</i> 1571, Gerard De Jode	356	X				
<i>Tabula Nova Orbis/Dieftert Situs Orbis Hydrographorum Ab Eo Quem Ptolomeus Posuit</i> by Laurent Fries, 1535			X			
<i>Paris wooden globe</i> , 1535	357			X		
The <i>Nancy globe</i> , 1530-40	363			X		
Polar world maps by Gerard Mercator, 1538					X	
<i>Carta marina</i> by Olaus Magnus, 1539	366		P			
Sebastian Münster, 1540	377		X	X		
Pierre Desceliers' <i>Planisphere</i> , 1550/1553	378		X			
map of Scandinavia by cartographer Martin Waldseemüller, 1541			X			
Nicolo and Antonio Zeno, 1558			X			
World map by Girolomo Ruscelli, 1561	383			X		
The Forlani map of North America: 1565	391	P				
<i>Universale Descrittione Di Tutta la Terra Conosciuta Fin Oui</i> , Paolo Forlani, 1565	398	X				
Guillaume Le Testu, 1566		P			X	
Gianfrancesco Camoccio, 1569					X	
<i>Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium emendate . . .</i> , Gerard Mercator,1569	406	X				
The Forlani map of North America: 1565	391	P				
<i>Universale Descrittione Di Tutta la Terra Conosciuta Fin Oui</i> , Paolo Forlani, 1565	398	X				
<i>Nova et Aucta Orbis Terrae Descriptio ad Usum Navigantium emendate . . .</i> , Gerard Mercator,1569	406	X				
<i>Septentrionalium Terrarum descriptio</i> , 1595, a polar map by Gerard Mercator	407	X				
John Dee's polar world map 1582	417.1	X				
<i>Illustri viro, domino Philippo Sidnaeo Michael Lok civis Londinensis hanc chartam dedicabat</i> : 1582	419	X				
Francis Gaulte in Peter Martyr, <i>De Orbe Nouo</i> ... 1587		X				
The <i>Skálholt</i> map, 1590 map by Sigurd Stefansson	431.6	X	X			



# Evolution of Greenland in Early Maps

5.19

Maps	Monograph	An Island	Greenland Portrayed as			
			A peninsula extending from			
			Europe	Asia	Polar Landmass	North America
<i>Americæa Pars Borealis, Florida, Baccalaos, Canada, Corterealis</i> , Cornelis de Jode, 1593	432	X				
Gerard de Jode's 1593 polar map	433	X				
Europe by Jodocus Hondius and Petrus Kaerius, 1595		P			X	
Giovanni Antonio Magini, 1597, 1598		X				
Willem Barentsz, 1598		X				
Luke Fox in his North-West Fox 1635					X	P
Jansson's map of the Arctic regions from 1644.						X
North Pole by Moses Pitt, 1680						X
<i>Typus Maritimus Groenlandiae Islandiae, Freti Davidis</i> , 1690 by Nicolaes Visscher		X				
Map of southern Greenland by Vincenzo Coronelli, <i>Frislanda and Parte della Groenelanda</i> , 1692		P				
Heinrich Scherer, 1702	492	X				
Map of Greenland, Hans Poulsen Egede, 1737		X				
A map of old Greenland or Oster Bygd & Wester Bygd, by Emanuel Bowen, 1747		P				
1770 map of Greenland [ <i>Carte de Groenland</i> ] by J. Laurent		P				
Clement Cruttwell, 1799						X
Map of Greenland in 1791 by Franz Joseph von Reilly		P				
North part of the globe corrected from the latest voyages, 1820						X
August Petermann's 1869 map		X				
Alexander Keith					X	
British North America, 1834		P				
Mitchell Map of North America 1860		X				
Map of Northern America, 1869 by G.W. Colton					X	X
Polar map by J.H. Colton, 1862					X	X
Petermann's 1869 map		X				
1920 map of Greenland from Salmonsens Konversationsleksikon		X				
		<i>P = probably</i>				